TATA POWER







Contents

CEO and MD's Address 04

Report Contour 06

Company Profile **09**

Corporate Governance 16

Sustainable Business 23

Care for People 29

Care for Environment 34

Occupational Health & Safety 40

Economic Performance 44

Care for Customers 47

Care for Community 55

GRI EUSS Content Index 61

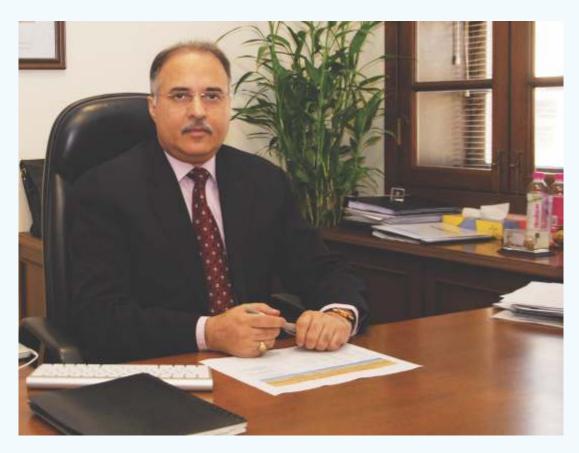
United Nations Sustainable Development Goals (SDG) Index 65

Assurance Statement 66

Annexures **70**

Abbreviations **72**

Feedback Form 73



CEO & MD's Address

Dear Stakeholders,

It is my pleasure to present to you Tata Power Company Limited's Seventh Sustainability Report for 2015-16. We continue our sustainability journey guided by our values and steered by 'Leadership with Care'. This report presents progress made on the material aspects including challenges faced and lessons learned. The report is prepared according to the Global Reporting Initiative (GRI) G4 guidelines (including the Electrical Utility Sector disclosure) with conformance to the 'In accordance-Comprehensive-level' and as per AA1000 Accountability Principles Standard 2008.

The company continues to show great resilience and promise in successfully navigating geopolitical and economic challenges through its foresight, prudence, breadth of its value chain, operational expertise, growing global footprint and customer focus.

The power sector in India continues to face challenges due to curtailed power demand from financially weak Discoms. Recent initiatives like UDAY (Ujwal Discom Assurance Yojana) is likely to support the demand side reforms. Another notable initiative from Government is fuel sector reform, emphasis on renewable energy capacity addition under the Intended Nationally Determined Contribution (INDC), competitive tariff for solar projects and Make in India programme that could revive the power demand. The company is strengthening its international presence in select geographies through partnerships, investment and services for key projects.

The company's strategy aims at sustainable profitable growth across generation, transmission, distribution and value added services leveraging electricity trading, open access, rooftop solar, solar EPC and defence. The

company continues to focus on renewable energy as a thrust area and targets capacity addition in line with the India's Intended Nationally Determined Contributions (INDC). The company has announced strategic intent, to have 30-40% share of total generation capacity from non-fossil fuel sources (including hydro power) by 2025.

The company continues to grow sustainably with strict compliance to applicable environmental regulations, progressive biodiversity initiatives, responsible ash utilisation or disposal, health and safety, product stewardship. The company continues to monitor environmental emissions and improve the generation efficiency. To address water resource challenges, company has taken up many studies and programs to lower or maintain the specific water consumption at its major power generation stations. The company also monitors all categories of waste and disposes it through appropriate authorised vendors.

The company has taken many initiatives in customer service and product stewardship. The initiatives include, customer awareness and training through various programs such as Club Enerji, NGO partnerships, customer camps, on demand energy audits, participation and encouragement to customers for joining Domestic Efficient Lighting Program (DELP) etc. The company has also adopted many digital initiatives from Personal Digital Assistant for meter data collection, e-billing, electronic payments, feedback tabs to 24x7 customer care call centre. Many other initiatives in transmission and distribution continue to reduce time to attend to complaints, and lower power supply interruptions. In Mumbai, company remains the lowest cost power supplier to the lower income families with sub 300 units per month consumption.

Our employees continue to be main pillar for delivering on company's vision. Company has devised need based trainings post detailed assessments, implemented state-of-the-art and innovative safety measures across its operations. At Tata Power, maintaining high safety standards at all its stations is of significant importance, as it is committed to protecting the health and safety

of each of its employees, contractors, customers and the communities in which it operates. A Safety Management System (SMS) is in place to ensure that both employees and contractors adhere to good safety practices and procedures at all times. The routine health checks are conducted to monitor occupation related illness/diseases.

The collective efforts from the employees and management are recognised by various awards with notable few being - World's Most Ethical Company by Ethisphere Institute, National Energy Conservation Awards for Discoms, Sustainable Plus Platinum by Confederation of Indian Industry, Portzer Prize for Excellence for Corporate Integration & Governance and many prestigious awards at the plant level.

We continue our sustainability journey from where we left off last year. As you will see in the report, we have made significant progress in a lot of initiatives in the area of Sustainability. Our sustainability roadmap over the next three years will focus on the expectations of our key stakeholders including our employees and have defined strategies to be more economically, socially and environmentally beneficial and impacting the triple bottom line.

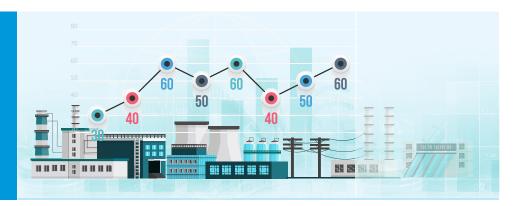
The report will provide you with accounts of actions taken by us along with results achieved. I also encourage you to give us your feedback on the report, and share your kind views, which will help us improve.

With best regards,

Anil Sardana

CEO & Managing Director





Tata Power always strives to deliver the best to all its stakeholders with the highest ethical practices. The company has successfully overcome geo-political and economic challenges with great resilience. The company is progressing towards improving the breadth of its supply chain, operational excellence and expanding international footprint without compromising on the customer focus.

The Company has adopted the GRI G4 Guidelines for the Sustainability Report 2015-16 and was among the early adopters of these new guidelines in the India post its launch. This is the seventh Sustainability Report and the last Sustainability Report was published in January 2016. The details on the purpose, reporting period, scope and boundary, methodology and scope limitations of the report are provided in the next sections.

Purpose

Tata Power's Sustainability Report is published annually for the company's stakeholders with an intent to provide account of economic, social, governance and environmental value delivered to different stakeholders groups and a cross-sectional view of the business regarding able governance and sustainability practices.

Reporting Period

The reporting period for this report is April 1, 2015 to March 31, 2016. Tata Power has aligned the report in accordance with the G4 reporting framework of GRI and Electric Utility Sector Supplement (EUSS). To ensure transparency and to showcase the best practices in Tata Power, it was decided to adopt the 'in accordance Comprehensive level' of disclosure of the G4 Guidelines. An in-house team has worked exhaustively to create reporting process, review mechanism, collection, and assimilation of data.

The report presents the progress made towards addressing the material issues, requirements of the National Voluntary Guidelines on Social, Environmental, and Economic responsibilities of Business (NVG-SEE) of Ministry of Corporate Affairs, Business Responsibility Reporting (BRR) by Securities and Exchange Board of India (SEBI), Carbon Disclosure Project (CDP) UK, United Nation Global Compact

(UNGC), Schedule VII of The Companies Act 2013, and Sustainable Development Goals (SDGs) of the United Nations. The Sustainability Report is brought out in addition to CSR Annual Report and Tata Power Community Development Trust (TPCDT) Annual Report, accessible at www.tatapower.com and www.tpcdt.org respectively.



The Report is specific to the Indian operations of Tata Power, viz. Generation, Transmission and Distribution of power. These includes seven generating stations namely Trombay; Coastal Gujarat Power Limited (CGPL), Mundra; Maithon Power limited (MPL), Maithon; Jojobera; Haldia; Industrial Energy Limited (IEL), Jamshedpur (Plant 5 and Power House 6) and 3 generating stations (Hydro), namely Khopoli, Bhira and Bhivpuri. However, the wind and solar generation are not in the scope of the report. Like last year, Strategic

Engineering Division (SED) continues to be part of the reporting boundary whereas Chemical Trombay Terminal Limited (CTTL) which was a 100% subsidiary underwent merger with Tata Power and therefore not reported separately. There have been no significant changes in the structure or ownership, data measurement method, etc. during the reporting period. Therefore, the reporting basis does not contain any change, nor affects the comparability principle.



Report Scope Limitations

This Report excludes all International Operations, Joint Ventures (JV), Associates and Upcoming projects. The table below presents the Subsidiaries, JVs and Associates and main Divisions of Tata Power.

TATA POWER **SUBSIDIARIES JOINT VENTURES ASSOCIATES** Chemical Terminal Trombay Ltd. Yashmun Engineers Ltd. Cennergi Pty. Ltd. Tsitsikamma Community Wind Farm (Pty.) Ltd. NDPL Infra Ltd. Amakhala Emoyeni RE Project 1 (Pty.) Ltd. Af-Taab Investment Co. Ltd. PT Mitratama Perkasa Tata Power Solar Systems Ltd. PT Mitratama Usaha Panatone Finvest Ltd. Powerlinks Transmission Ltd. PT Arutmin Indonesia PT Kaltim Prima Coal Tata Power Trading Co. Ltd. Indocoal Resources (Cayman) Ltd. Tata Power Green Energy Ltd. PT Indocoal Kalsel Resources Nelco Ltd. PT Indocoal Kaltim Resources Dagachhu Hydro Power Tubed Coal Mines Ltd. Tatanet Services Ltd. Corporation Ltd. Mandakini Coal Company Ltd. **Maithon Power Ltd.*** Gamma Land Holding Ltd. **Industrial Energy Ltd.*** Solace Land Holding Ltd. Industrial Power Utility Ltd. Beta Land Holdings Ltd. Tata Projects Ltd. Ginger Land Holdings Ltd. Tata Power Renewable Energy Ltd. Candice Investments Pte. Ltd. Coastal Gujarat Power Ltd.* PT Nusa Tambang Pratama Bhira Investments Ltd. PT Marvel Capital Indonesia Bhivpuri Investments Ltd. PT Dwikarya Prima Abadi ASL Advanced Systems Pvt. Ltd. PT Kalimantan Prima Power Khopoli Investments Ltd. PT Citra Prima Buana Energy Eastern Pte. Ltd. PT Guruh Agung Trust Energy Resources Pte. Ltd. PT Citra Kusuma Perdana OTP Geothermal Pte. Ltd. Tata Power Delhi Distribution Ltd The Associated Building Co. Ltd. PT OTP Geothermal Tata Power Jamshedpur Distribution Ltd. PT Sorik Marapi Geothermal Power PT Sumber Energi Andalan Tbk PT Baramulti Sukessarana Tbk PT Antang Gunung Meratus Dugar Hydro Power Ltd. Adjaristsqali Netherlands BV Brihat Trading Private Ltd. Tata Power International Pte. Ltd Adjaristsqali Georgia LLC Tata Ceramics Ltd. Indocoal KPC Resources (Cayman) Ltd Supa Windfarm Ltd. Koromkheti Netherlands BV Poolavadi Windfarm Ltd. Koromkheti Georgia LLC Nelito Systems Ltd. Itezhi Tezhi Power Corporation Nivade Windfarm Ltd.

^{*} Entities included for reporting

Methodology

Tata Power's sustainability performance is process-based for all the parameters pertaining to the triple bottom line. The SAP-based or other web-based systems are deployed for management of data related to aspects such as Finance, Environment, Corporate Social Responsibility (CSR), Human Resources (HR), Occupational Health and Safety, Supply chain, Product stewardship etc. The data on environmental parameters, consumption/emission-related is intensity-based and reflects the trends over the previous years. The data provided in the report is externally assured by Price Waterhouse Chartered Accountants LLP as per ISAE 3000 and AA 1000 AS Standards.

The report is reviewed and approved by the Chief Sustainability Officer (CSO). Tata Power appreciates feedback from its stakeholders to improve any aspect pertinent to the report. To aid this, a form is attached at the end of the report to collect feedback which can be sent to the address;

Chief Sustainability Officer The Tata Power Company Limited 34, Sant Tukaram Road, Mumbai 400009.





Tata Power is well aligned to the business ethos of the Tata Group. Major business activities of the Company are in Generation, Transmission, Distribution-cum-Retail, Power Trading, Power Services, Coal Mines and Logistics, Strategic Engineering for defence applications, Solar Photovoltaic (PV) manufacturing and associated project management services (Engineering, Procurement, and Construction).

Tata Power presently generates electricity from Thermal, Hydro, Wind, and Solar, as well as from Waste heat recovery. Some of the Business highlights of the reporting period are presented below.

Business Overview - Key Highlights

- Company de-commissioned the 81 MW Belgaum Power Plant pursuant to conclusion of the PPA term
- Company's 100% subsidiary Tata Power Renewable Energy Limited (TPREL) commissioned 104 MW of Wind and Solar projects in India, consisting of 60 MW of Wind projects in Gujarat (Rojmal) and 44 MW of Wind projects in Madhya Pradesh (Lahori)

Agreement with Telangana State Northern Power Distribution Company Limited (TSNPDCL) for 15 MW Solar project, which it won through competitive bidding

- Company's subsidiary, TPREL, signed Share Purchase Agreement for acquisition of 100% shareholding in Indo Rama Renewables Jath Limited (IRRJL), which is a 100% subsidiary of Indo Rama Renewables Limited (IRRL). IRRJL has a 30 MW operating wind farm in Sangli District of Maharashtra
- Company's subsidiary, Tata Power International Pte. Ltd. (TPIPL), signed a Share Purchase and Share Sale Agreement for OTP Geothermal Pte with KS Orka Renewable Pte.

Tata Power is among the leading private power generating companies in India with gross power generation capacity of 9,184 MW (as of 31st March 2016) with value chain existence in all the segments; viz. Generation, Transmission, Distribution, Trading and has assets for

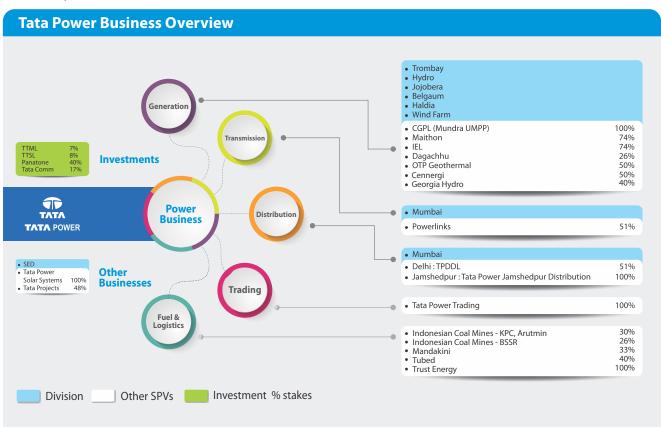


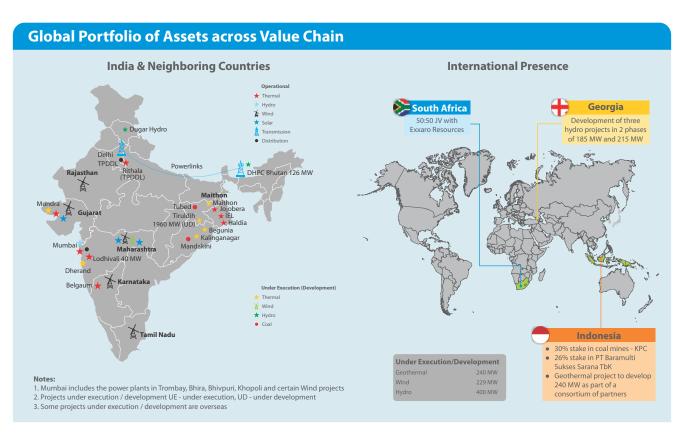
- Company subsidiary Industrial Energy Limited (IEL), commissioned waste gas based thermal plant of 135 MW capacity (i.e. 67.5 MW X 2 units) in Kalinganagar, Tata Steel
- Itezhi Tezhi Power Corporation Limited (ITPC), a JV between Company and Zambian utility ZESCO Limited (ZESCO), commissioned Hydro power plant of 120 MW (60 MW X 2 Units) in Zambia
- Company's subsidiary, TPREL, signed a Power Purchase

ensuring fuel supply. The portfolio has a balanced mix of operating, under construction and development projects with new capacity of 682 MW under execution (as of 31st March 2016). Further, there exists a broad mix of tariff models including regulated returns, captive, Independent Power Producer (IPP), Ultra Mega Power Project (UMPP) and merchant sales.

To reduce reliance on conventional energy sources, the strategy is to diversify into renewable energy including hydro, wind and solar with 1,374 MW of existing capacity

and approx. 614 MW in new capacity under construction and 610 MW under development (as of 31st March 2016) which makes Tata Power as one of the largest non-conventional energy players in the country. Tata Power has international presence in Indonesia, Bhutan, Georgia, South Africa and Zambia. These projects are under various stages of execution and development.





Fuel

Tata Power has secured the supply of fuel for its operations through long term contracts. The details of fuel supply are given below. Tata Power will continue to tap new fuel assets from across the globe as and when the need arises for sustainable supply for its operation.

Project	Requirement	Source
Trombay	3 MTPA coal	Coal Mines, Indonesia
	Oil	Nearby refineries
	1 MMSCMD of Gas	GAIL
Mundra	12 MTPA coal	Coal Mines, Indonesia
Maithon	4.5 MTPA coal	Coal India Ltd
Jojobera	Coal	West Bokaro Coal Fields
		and Mahanadi Coal Fields
Haldia	Flue Gas	Tata Steel, Haldia
IEL	Furnace & Coke oven Gas	Tata Steel, Jamshedpur
	Coal	West Bokaro Coal Fields

Fuel Transportation

Tata Power's Trust Energy Resources is a wholly owned subsidiary in Singapore. Trust Energy's scope of business is to securitise regular coal supply and the shipping of coal for Tata Power's thermal power generation operations. Tata Power is not quantifying the emissions from coal logistics during sea transportation.

Generation

Tata Power's present portfolio in power generation is 9,184 MW and has over 7,362 MW projects in various stages of execution and development. Tata Power's Hydro generating stations are in Khopoli, Bhivpuri and Bhira. The thermal power generating stations are at Trombay, Mundra, Maithon, Jojobera, Haldia, Kalinganagar and Jamshedpur. In this reporting year, there was an addition of 389 MW to the generation capacity from thermal, hydro, wind, and solar power. The details of installed capacity are provided in the table below.

Details of Installed Capacity				
Fuel Source	Location	State/Country	Installed Capacity (MW)	Total Capacity (MW)
	Trombay	Maharashtra	1,580	7,328
Thermal	Mundra	Gujarat	4,000	
inermai	Maithon	Jharkhand	1,050	
	Jojobera	Jharkhand	548	
Oil/Gas	Rithala*	New Delhi	108	108
Thermal Waste/	Haldia	West Bengal	120	
Heat Recovery	Jamshedpur (unit 6)	Jharkhand	120	375
ricathecovery	Kalinga Nagar (unit 1 & 2)	Odisha	135	
	Bhira	Maharashtra	300	
	Khopoli	Maharashtra	72	
Hydro	Bhivpuri	Maharashtra	75	693
	Dagachhu	Bhutan	126	
	Itezhi Tezhi	Zambia	120	
		Maharashtra	238	
		Madhya Pradesh	44	
		Gujarat	149	619
Renewable	Wind Farms	Karnataka	50.4	
Reliewable		Tamil Nadu	99	
		Rajasthan	39	
		Maharashtra	3	
		Gujarat	25	
	Solar	Maharashtra	29	60
		Delhi	1.65	
Total				9184

^{*} Not Operational



Renewable Portfolio

Tata Power is conscious of its role as a sustainability steward and embraces the challenges of climate change. Tata Power strives to lead the path towards growth with responsibility and committed for generating electricity using non greenhouse gases (GHG) sources (i.e. from hydro, wind and solar). Tata Power has 15% of MW capacity i.e. 1,374 MW (as on 31st March 2016) through non GHG sources, which is

aligned to the strategic intent to generate 30-40% of total installed capacity from non GHG sources by 2025.

Forthcoming Projects

Tata Power is on a multi-fold growth path. By 2025, Tata Power strategic intent plan is to have Sustainable Profitable Growth: ROCE >= WACC from below.

Generation	20,000 MW
Share of non-fossil based generation	30-40% share of generation capacity to be non-fossil (including Hydro)
Transmission, Distribution & DDG	Transmission, Distribution and DDG catering to 5 GW capacity and 2.5 million consumers
Fuel Resources	Securitization of long term fuel requirements (Coal and Gas)
Value Added Businesses	10X growth in Revenue and PBT– O&M/ PM Services, Trading, Open Access, Rooftop Solar, Solar EPC, Defence

To achieve the set target, various domestic as well as international projects are under execution and development stages, as given below:

Projects under Execution						
Project	Fuel	Capacity (MW)	Status of Completion	Power off-take	Expected COD	
Renewable Projects	Wind/ Solar	~200	Under Execution	PPA with states	FY 17	
Georgia - 40% stake	Hydro	185	Land acquired; civil work in progress	PPA to be executed closer to COD	FY 17	
Kalinganagar, Odisha (3rd)	Flue Gas	67.5	2 units (2 x 67.5MW) synchronized	2 units (2 x 67.5MW) synchronized	FY 17	
South Africa	Wind	229	Financial closure completed. Construction in progress	PPA with Eskom for 20 years	FY 17	

Projects under Planning				
Project	Fuel	Capacity (MW)	Current Status	
Dugar, Himachal Pradesh	Hydro	380	Approval of the detailed project report awaited	
Maithon Phase II, Jharkhand	Coal	1,320	Land obtained and Environmental Impact Assessment (EIA) in progress	
Mundra Phase II, Gujarat	Coal	1,600	Land obtained	
Dehrand, Maharashtra	Coal	1,600	Land acquisition in progress	
Georgia Phase-II, III	Hydro	215	In planning stage	
Vietnam	Coal	1,320	In planning stage	
Total Development Capacity		6435		

Transmission

Transmission operations in the Mumbai License area spread over the entire city of Mumbai and suburbs with its receiving stations, and extended up to the hydro generating stations in Raigad district of Maharashtra. The entire transmission system is centrally controlled from Power System Control

Centre (PSCC) through the state of the art unified Supervisory Control and Data Acquisition (SCADA) system. Tata Power transmission is continuously upgrading and augmenting the transmission system to cater to the increasing demand of customers. The Transmission assets, which are part of the Mumbai License Area, had a grid

availability of 99.45% as against the Maharashtra Electricity Regularity Commission (MERC) norm of 98%. Availability was maintained at high level by proactive actions taken based on preventive maintenance practices, effective condition monitoring and judicious planning and execution of planned outages.

During the year, the Company added 500 MVA of Transformation Capacity and added/augmented 18.15 ckms of network. It includes the following major projects:

- 220 kV up-rating of Kalwa-Salsette-4 line (it has been completed in a benchmark time of 28 days to enable import of 300 MW additional power to Mumbai)
- 220 kV Salsette Saki Transmission line to strengthen network in North Mumbai
- 220 kV Mahalaxmi GIS to cater to load growth
- 110 kV Dharavi-BKC Line for enhanced reliability

To spread awareness on safety across the state of Maharashtra, Tata Power has actively participated in 'Electrical Safety Week' organized by Chief Electrical Inspector as per direction of Government of Maharashtra. The Company organized special awareness programs during pre-monsoon, Ganapati Festival and Sankranti season in the vicinity of High Tension (HT) lines in Mumbai, under its Jan Jagruti Abhiyaan initiative. The objective is to reduce electrical accidents that can be caused by unauthorizedly living in areas which are close to high voltage transmission lines. This is third year of success where no line tripping or human suffering was there due to kites during Sankranti season. Over 34,000 people were sensitized in various sessions throughout the year.

Distribution and Supply

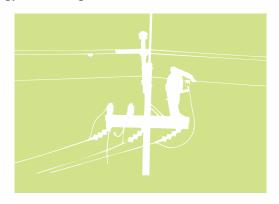
Tata Power has 4,058 kms of distribution network with 844 customer substations and 32 distribution sub-stations across Mumbai Distribution License Area. The customer base of more than 600,000 in Mumbai and some of its bulk customers include BEST, Railways, Port Trust, BARC, Refineries and other important installations in the city. As in all parts of the business, improvement in operational efficiency is a key focus area. Tata Power has taken a number of initiatives to improve the quality and reliability of its power supply and enhance customer service. Some of the highlights of the year include:

 Total consumer base increased to 6,64,407 with the addition of 18,511 consumers to the Company's network (direct) and 42,157 consumers transferring from other networks (welcome consumers), during FY16

- Annual distribution sale was 5,783 MUs in FY16 as against 5,969 MUs in FY15
- In FY16, 266 kms of network was added in Mumbai license area, which comprised of 102 km High Tension (HT) and 164 km Low Tension (LT) network. In addition, 75 consumer substations (capacity addition - 98 MVA) and 2 distribution substations (capacity addition - 240 MVA) were commissioned
- Maharashtra's first solar rooftop net metering solution was operationalized for a Tata Power consumer
- Distribution Projects have been certified under the Integrated Management System (IMS) (ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007), a globally accepted and recognized system
- To enhance safety, to care for the environment and to overcome the challenges of paucity of space, Tata Power has commissioned
 - India's first Natural Ester filled power transformer (20/28 MVA) and 13 distribution transformers
 - 29 distribution transformers were retrofitted with Natural Ester for life and capacity enhancement
 - India's first compact, pre-fabricated, plug and play 33/11 kV substation, E-house (Electrical House).

Energy Availability and Reliability

Tata Power as a sustainable power utility, endeavours to operate its stations efficiently, have non-interrupted energy supply or acceptable levels of energy interruptions to generate a consistent electrical output and is available to meet predicted peaks in demand. The Generation (Thermal/Renewables), Average Generation Efficiency (%) of Thermal Station based on the Energy Source and Average Plant Availability factor of Thermal Stations by energy source are given below.



Generation (Thermal/Renewables)					
Net Thermal Production (MUs)	2013-14	2014-15	2015-16		
Coal					
Trombay (Unit - 5 & 8)	5,003.32	3,796.80	5,064.29		
Mundra	21,971.69	24,502.1	23,678.9		
Maithon	5,963.52	6,312.12	6,779.9		
Jojobera	3,597.56	3,833.39	3,740.53		
Oil					
Trombay (Unit - 6)	453.68	770.18	14.97		
Trombay CCGT (Unit - 7)	1,241.60	1,119.27	1,148.8		
Thermal Waste (PH - 6)	929.36	876.97	873.4		
Heat Recovery (Haldia)	942.35	815.18	789.07		
Net Renewable Production					
Hydro	1,597	1,406.13	1,067.2		
Wind	761.51	768.11	857.00		
Solar	47.92	86.15	96.3		

Average Generation Efficiency (%) of Thermal Station based on the Energy Source					
Thermal Plant Effi	iciency	2013-14	2014-15	2015-16	
Coal					
Trombay	(Unit - 5)	34.38	34.30	34.13	
	(Unit - 8)	38.06	37.80	37.40	
Mundra		39.77	41	41.27	
Maithon		35.98	36.14	36.68	
Jojobera		32.85	33.15	33.30	
Oil / Gas					
Trombay (Unit - 6)		32.47	30.34	29.21	
Gas					
Trombay CCGT (Unit - 7)		43.04	43.71	40.26	
Thermal Waste (PH - 6)		33.24	32.16	32.55	
Heat Recovery (Haldia)		96.05	90.64	80.21	

Average plant availability factor of Thermal Stations by Energy Source (%)				
Coal	2013-14	2014-15	2015-16	
Trombay (Unit - 5 & 8)	91.78	69.45	95.29	
Jojobera	95.92	95.09	95.34	
Nundra	82.57	83.14	82.17	
Maithon	87.12	87.44	89.59	
Oil / Gas				
Trombay (Unit - 6)	30.08	59.27	3.20	
Gas				
Trombay CCGT (Unit - 7)	86.22	77.81	92.79	
Thermal Waste (PH - 6)	96.60	94.40	99.64	
Heat Recovery (Haldia)	98.35	95.81	96.74	

Other Key Business

Tata Power Trading

- 100% subsidiary, holds a trading license for a period of 25 years starting from 2004
- Holds a Category I trading license, which permits it to trade any amount of power

Shipping Subsidiaries

- Trust Energy Resources Pte Ltd incorporated in Singapore for owning bulk carriers to meet shipping requirements and trading in fuel, Energy Eastern Pte Ltd incorporated for chartering of ships
- To be met through a combination of long term charters and out right purchases of cape size vessels - 3 long term charters signed and 2 cape size ships purchased

Tata Power Solar Systems Ltd.

- Solar Cell Manufacturing Faility at Bengaluru, Karnataka
- Has four main business lines:
 - manufacturing and sale of solar photovoltaic cells and modules
 - providing engineering, procurement and construction/commissioning
 - services as well as operations and management services to solar project developers, developing and selling solar photovoltaic products in rural markets
 - developing and selling solar thermal (water heating) products in urban markets

Strategic Engineering Division (SED)

- Originated as an internal R&D unit for power electronics; designs and develops electronic devices
- SED was awarded the modernize airfield infrastructure for the Indian Air Force
- Does not manufacture ammunition or explosives of any kind, including cluster bombs and anti personnel mines

Awards

Tata Power's commitment to operational excellence and sustainability is honored in national and international platforms. Some of the awards received in FY 15-16 are below:

- Named as the Word's Most Ethical Company by Ethisphere Institute, for the third year in succession
- Economic Times National CSR Survey –Tata Power Ranked 2nd for the second consecutive year
- Second prize in National Energy Conservation Awards for Discoms
- Conferred Sustainable Plus Platinum by CII
- Portzer Prize for Excellence for Corporate Integration & Governance
- Tata Power won 'Gold Award' at the Arogya World Healthy Workplace Award
- Best Performing Project of the Year Dalot Wind Farm, at Indian Wind Energy Forum
- Won Silver Shield in category 'Performance of Distribution Companies' for Tata Power Distribution and Consolation Award in category Performance of Thermal Power Stations for Trombay Thermal Power Station by CEA

- Won three prestigious awards at the Tata Affirmative Action Programme Annual Convention
- Excellent Energy Efficient Unit and Most Useful Presentation for Trombay Thermal Power Station and Energy Efficient Unit for Haldia Generating Station at 16th Cll National Energy Award for Energy Management
- Second Prize for Trombay Thermal Power Station in Power Generation Group at the Best Safety Practices Award Competition
- Won two prestigious awards at 55th Association of Business Communicators of India Awards - 'Special Column Award' for Enerji Talk and 'Civik and Moral Values'forTataPowerClubEnerji
- CBIP Award for Overall Outstanding Performance in Power Sector at Central Board of Irrigation and Power (CBIP) Day Celebration.













Governance Philosophy

The essence of Corporate Governance is about maintaining the right balance between economic, social, environmental, individual and community goals. At Tata Power, good corporate governance is a way of life and the way of doing business, encompassing every day's activities and is enshrined as a way of working. The Company is focused on the enhancement of long-term value creation for all stakeholders without compromising on integrity, societal obligations, environment, and regulatory compliances. The Tata Power team's actions are governed by the company values and principles, which are reinforced at all levels of the organisation. These principles have been and will continue to be the guiding force in future.

For the Company, good corporate governance is a synonym for sound management, transparency and disclosure, encompassing good corporate practices, procedures, standards and implicit rules which propel a Company to take sound decisions. As a Company with a strong sense of values and commitment, Tata Power believes that profitability must go hand in hand with a sense of responsibility towards all stakeholders. This is an integral part of Tata Power's business philosophy. The cardinal principles such as independence, accountability, responsibility, transparency, trusteeship, and disclosure serve as means for implementing the philosophy of Corporate Governance.

This philosophy is reflected and practised through the Tata Code of Conduct (TCoC), the Tata Business Excellence Model (TBEM) and the Tata Code for Prevention of Insider Trading and Code of Corporate Disclosure Practices, which form guidelines for "Leadership with Trust". The Company is committed on focussing its energies and resources in creating and positively leveraging shareholders' wealth, and at the same time, safeguarding the interests of all stakeholders. This is the path to sustainable and profitable existence and growth.

Vision

To be the most admired and responsible Integrated Power Company with international footprint, delivering sustainable value to all stakeholders.

Mission

Tata Power aims at becoming the most admired and responsible power Company delivering sustainable value by

- Operating assets at benchmark levels
- Executing projects safely, with predictable benchmark quality, cost and time
- Growing the Tata Power businesses, be it across the value chain or across geographies, and also in allied or new businesses
- Driving Organisational Transformation that will make the Company have the conviction and capabilities to deliver on the strategic intent
- Achieving the Company's Sustainability intent of 'Leadership with Care', by having leading and best-inclass practices on Care for Environment, Community, Customers, Shareholders, and People.

Values

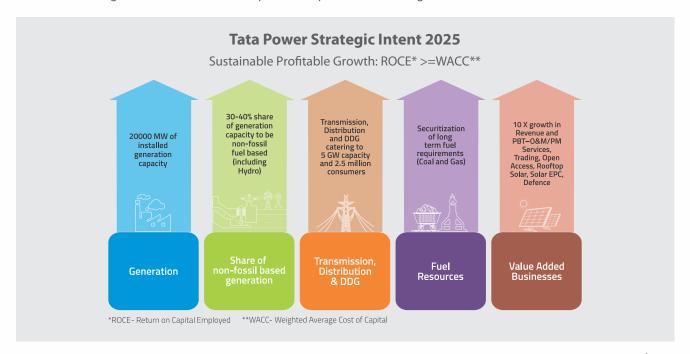
The values today are 'SACRED' to the Company

- **Safety:** Safety is a core value over which no business objective can have a higher priority
- Agility: Speed, responsiveness and being proactive, achieved through collaboration and empowering employees
- Care: Care for our environment, care for our customers and shareholders - both existing and potential. Care for our community and care for our people (our employees and partners)
- **Respect:** Treat all stakeholders with respect and dignity
- **Ethics:** Achieve the most admired standards of Ethics through Integrity and mutual Trust

 Diligence: Do everything (set direction, deploy actions, analyse, review, plan and mitigate risks, etc.) with a thoroughness that delivery, quality and excellence in all areas, and especially in operations, execution and growth.

Strategic Intent

Tata Power Strategic Intent 2025 has drawn up concrete plans for business growth across the value chain



Governance Framework

Corporate Governance is necessary to oversee strategy and ensure responsibility and ethical corporate behaviour towards all stakeholders thus creating conditions necessary to nurture Sustainable Development. A part of the 145-year old Tata Group, Tata Power has inherited a legacy of standing strong and being fair, transparent, and ethical in all the facets of business. Corporate governance

standards and processes are aligned with the TCoC¹ and various policies for robust governance.

Board of Directors

Size and composition of the Board

As on 31st March 2016, the Company's Board of Directors comprised 9 members, 2 of whom are Executive Directors and 7 are Non-Executive Directors (NEDs). Out of these 7 NEDs, 5 are Independent Directors*.

Name	Designation (ED / NED / Independent)	Age (years)	Gender
Mr. Cyrus P. Mistry, Chairman	Non-Independent, Non-Executive	47	
Dr. Homiar S. Vachha		73	
Mr. Nawshir H. Mirza		64	
Mr. Deepak M. Satwalekar	Independent, Non-Executive	67	
Mr. Piyush G. Mankad	Non-Executive	74	Male
Mr. Ashok K. Basu		74	
Mr. Pravin H. Kutumbe	Non-Independent,	54	
(Representative of LIC as investor/Lender)	Non-Executive		
Mr. Anil Sardana, CEO & Managing Director	Five quiting	56	
Mr. Ashok S. Sethi, COO & Executive Director	Executive	61	

^{*} Ms. Vishakha V. Mulye, Independent (Woman) Director on the Board, submitted her resignation as Director, which was effective 18th January 2016. In her place, Ms. Sandhya S. Kudtarkarwas appointed as an Additional (Woman) Director of the Company with effect from 16th April 2016.

http://www.tata.com/ebook/tcoc/index.html

These Directors bring in a wide range of skills and experience to the Board. The Board provides leadership, strategic guidance, objective, and an independent view to the Company's management while discharging its fiduciary responsibilities, thereby ensuring that the management adheres to high standards of ethics, transparency and disclosure. The Board periodically evaluates the need for change in its composition and size.

Term of Board membership

The Nomination and Remuneration Committee (the NRC) determines the appropriate characteristics, skills, and experience required for the Board as a whole and for individual members. Board members are expected to possess the required qualifications, integrity, expertise, and experience for the position. They should also possess expertise and insights in sectors / areas relevant to the Company, and have ability to contribute to the Company's growth. As per the Governance Guidelines, the retirement age for Managing / Executive Directors, NEDs and Independent Directors is 65 years, 70 years and 75 years, respectively.

Selection and appointment of new directors

The Board is responsible for the selection of new directors. The Board delegates the screening and selection process involved in selecting new directors to the NRC. Considering the existing composition of the Board and requirement of new domain expertise, if any, the NRC reviews the potential candidates. The assessment of members to the Board is based on a combination of criteria that include ethics, personal and professional stature, domain expertise, gender diversity, and specific qualification required for the position. The NRC then places the details of the shortlisted candidates who meet these criteria, to the Board for its consideration. If the Board approves, the person is appointed as a Director, subject to the approval of the shareholders at the Company's general meeting.

The details pertaining to expertise and qualification of the Directors is given in Annexure 1. None of the Directors on the Board is a Member on more than 10 Committees and Chairman of more than 5 Committees across all the companies in which he/she is a Director.

The Governance structure of the Organisation and it's committees are responsible for decision making on Economic, Environmental and Social impacts, as well as delegating authority for Triple bottom line topics from the highest Governance body to senior executives and other employees The organisation has also appointed Executive level positions responsible for Economic, Environmental and Social focus areas and these report to the Chief Executive Officer and Managing Director (CEO & MD).

Committees of the Board

The Committees of the Board focus on specific areas and make informed decisions in line with the delegated authority. Each Committee of the Board functions according to its role and defined scope.

Audit Committee of Directors

The four member committee consists only of Independent Directors. The CEO & Managing Director, COO and Executive Director, the Chief Finance Officer (CFO) and Chief of Internal Audit attend the meetings.

The role and responsibilities of this Committee include:

- Oversight of the Company's financial reporting
- processes and disclosure of financial information to ensure that the financial statements are correct, complete, consistent with information known to the Committee members, sufficient and credible.
- Reviewing, with management, the quarterly/annual financial statements and Auditor's Report thereon, before submission to the Board for approval

Nomination and Remuneration Committee (NRC)

The NRC comprises of 4 members of which 3 are Independent Directors, the Chairman of the Committee is Independent and the Non-Executive Chairman of the Board is the Member of the Committee.



The Committee is responsible for formulating the criteria for determining qualification, positive attributes and independence of a director. The Committee is also responsible for recommending to the Board a policy relating to the remuneration of the directors, key managerial personnel and other employees. The Board has adopted the Policy on Board Diversity & Director Attributes and Remuneration Policy for Directors, Key Managerial Personnel and other employees of the Company. The Board has also adopted a Charter of this Committee which specifies its principles and objectives, composition, meetings, authority and power, responsibilities, reporting, evaluation etc.

Remuneration of Board of Directors

The philosophy for remuneration of directors, Key Managerial Personnel and all other employees of Tata Power is based on the commitment of fostering a culture of leadership with trust. The remuneration policy has been prepared by the Nomination and Remuneration Committee (NRC).

Non-Executive Directors (NED)

The NEDs are paid remuneration by way of Commission and Sitting Fees. In terms of the Members' approval obtained at the Annual General Meeting (AGM) held on August 16, 2013, the Commission is paid at a rate not exceeding 1% per annum of the net profits of the Company.

The distribution of Commission amongst the NED's is placed before the Nomination & Remuneration Committee and the Board.



The Company pays remuneration by way of salary, perquisites, and allowances (fixed component) and commission (variable component) to the CEO & MD and the Executive Director. Salary is paid within the range approved by the Members. Annual increments effective 1st April each year, as recommended by the NRC, are placed before the Board for approval and shareholders views are also taken into account on salary and related details of the CEO & MD and Executive Directors. The ceiling on perquisites and allowances as a percentage of salary is fixed by the Board. Within the prescribed ceiling, the perquisite package is recommended by the NRC

and approved by the Board.

Management Staff

Remuneration of employees largely consists of basic remuneration, perquisites, allowances and performance incentives. The components of the total remuneration vary for different grades and are governed by industry patterns, qualifications and experience of the employee, responsibilities handled by him, his annual performance, etc. For the last few years, efforts have also been made to link the annual variable pay of employees with the performance of the Company. The performance pay policy links the performance pay of each officer to his individual, divisional and overall organisational performance on

parameters aligned to Company's objectives. The ratio of remuneration of the highest paid employee (CEO & MD) to the median annual total compensation of all employees for the year 2015-16 was 69.65. The percentage increase of annual total compensation of the highest paid individual is 18% and the percent increase in the annual total compensation of all employees is 6.50%.

Corporate Social Responsibility Committee (CSR)

The CSR Committee comprises of 3 members, is chaired by an Independent Director and has 2 Executive Directors.

The broad terms of reference of the Committee are as under:

- Formulate and recommend to the Board, a CSR Policy which shall indicate the activities to be undertaken by the Company or may be prescribed by the rules thereto;
- Recommend the amount of expenditure to be incurred on the activities referred to in the above clause; and
- Monitor the CSR Policy of the Company from time to time.

Stakeholders Relationship Committee (SRC)

The SRC considers and resolves the grievances of security holders of the Company. It consists of 1 Independent Director who is the Chairman of the Committee, 1 Non-Executive and 1 Executive Director as Members.

The role and responsibilities of this Committee are to:

- Review statutory compliance relating to all security holders.
- Resolution of the grievances of all security holders.
- Oversight of compliances in respect of dividend payments and transfer of unclaimed amounts to the Investor Education and Protection Fund.
- Oversight and review of all matters related to the transfer of securities of the Company.
- Ensure setting of proper controls and oversight of performance of the Registrar and Share Transfer Agent.
- Approval of issue of duplicate share certificates of the Company.
- Approval of transmission of securities.
- Review of movements in shareholding and ownership structure of the Company.
- Recommend measures for overall improvement of the quality of investor services.
- Conduct a Shareholder Satisfaction Survey to judge the level of satisfaction amongst shareholders.
- Suggest and drive implementation of various shareholder-friendly initiatives.

Risk Management Committee

The Risk Management Committee consists of three independent directors, one Executive Director, CFO and Chief of Audit. The Chairman of the Committee is an Independent Director.

The Board has adopted Risk Management Strategy which specifies the objective, benefits of Risk Management, Risk Management Policy, Risk Management Process, Risk Organization Structure, Risk Culture etc. The Risk Management policy is available on the Company's website www.tatapower.com.

The role and responsibilities of this Committee include the following:

- To review Risk Management Policy and its deployment.
- To review Risk Management framework and its effectiveness and set direction.
- To monitor and review Risk Management Plan.
- To decide the risk appetite of the Company and, accordingly, guide the Board in taking up new investments.
- To review the major risks.
- To report high value risks and its mitigation to the Board.

Executive Committee of the Board

The Executive Committee of the Board comprises of 5 members, out of which the Chairman, is a Non-Executive Director, 2 are Independent Directors and 2 are Executive Directors. This Committee covers a detailed review of the following items before being presented to the Board:

- Business and strategy review
- Long-term financial projections and cash flows

- Capital and Revenue Budgets and capital expenditure programmes
- Acquisitions, divestments and business restructuring proposals
- Senior management succession planning
- Any other item as may be decided by the Board

Ethics and Compliance Committee

The Company adopted the TCoC for Prevention of Insider Trading and Code of Corporate Disclosure Practices (the Code) to be followed by Directors, Officers and other employees. The Code contains regulations for preservation of price sensitive information, pre-clearance of trade and monitoring and implementation of the Code. Ethics and Compliance Committee comprises of two members, of whom the Chairman is an Independent Director and other is Executive Director.

Board Evaluation

The Board carries out an annual evaluation of its own performance, as well as the working of its Committees. The Board works with the Committee to lay down the criteria for the performance evaluation. The contribution and impact of individual Directors is reviewed through a peer evaluation on parameters such as level of engagement and participation, flow of information, independence of judgement, conflicts resolution and their contribution in enhancing the Board's overall effectiveness. Feedback-cum-assessment of individual directors, the board as a whole and its committees is conducted. The feedback obtained from the interventions is discussed in detail and, where required, independent and collective action points for improvement are put in place.

Shareholding Pattern

Shareholding pattern as on 31st March 2016.

Name of Shareholder	Total holdings	% to capital
Tata Sons Limited	83,97,99,682	31.05
Life Insurance Corporation of India	36,98,66,780	13.68
Matthews Pacific Tiger Fund	16,56,20,436	6.12
National Westminster Bank Plc As Depositary of First State Global		
Emerging Markets Leaders Fund A Sub Fund of First State Investments	8,78,45,474	3.25
ICVC		
The New India Assurance Company Limited	6,89,54,953	2.55
General Insurance Corporation of India	6,81,76,404	2.52
Tata Steel Limited	3,91,22,725	1.45
Aberdeen Global Indian Equity (Mauritius) Limited	3,65,98,000	1.35
SBI Mutual Funds	2,80,25,908	1.04
Abu Dhabi Investment Authority	2,32,75,987	0.86

Corporate Governance Policies

The Corporate Governance policies cover areas ranging from Business dealings to Media Policy, from Human Rights to Responsible Supply Chain. These help in making the governance mechanism more robust. All the policies are reviewed as per the need. Few of these policies are given below:

- Tata Code of Conduct for Prevention of Insider Trading
- Code of Corporate Disclosure Practices, Code of Conduct for NED and Code of Conduct for Business Dealings
- Whistle Blower Policy
- Policy of Information Security
- IT Policy
- Gift Policy
- Customer Service Policy
- Business Continuity Policy
- Risk Management Policy

In addition to the Corporate Governance policies, Tata Power is also governed by many unique policies, such as; Sustainability, Environment, Community Relations, E-Waste Management, Health and Safety, Human Rights (HuR), Prevention of Sexual Harassment (POSH), Responsible Supply Chain Management (RSCM), Advocacy, Affirmative Action (AA), Corporate Communication, Energy Conservation and Customer Satisfaction and Media. The links to all these policy statements are available on Tata Power's website². The roles and responsibilities of the committees of the Board are given in Tata Power's Annual Report 2015-16³.

Risk Management

Based on the Risk Management Policy a standardized Risk Management Process and System has been implemented across Tata Power Group. Risk plans have been framed for all identified risks and uploaded in the system with mitigation action, target dates and responsibility. This has enabled continuous tracking of status of mitigation action and monitoring of Risk Mitigation Completion Index (RMCI). The Risk Register contains the mitigation plans for eleven categories of risk. Eight Functional Risk Management Committees (FRMCs) closely monitor and review the risk plans.

All risks have been classified into strategic, tactical and operational risks. Apex Risk Management Committee (ARMC) meets every quarter to review major strategic and tactical risks, identify new risks and assess the status of mitigation initiatives.

¹http://www.tatapower.com/aboutus/corporate-policies.aspx

As per the regulatory requirement, a Risk Management Committee (RMC) was constituted comprising of 3 Independent Directors, 1 Executive Director, Chief Financial Officer and Chief Risk Officer. The RMC meets regularly to review critical strategic risks and summary of top risks of each of the eleven categories and their status in terms of mitigation actions.

The Company has renewed its risk quantification method which helps identify key risks of the organisation and reduce subjectivity in assessment of residual value of each risk. This will further help implement appropriate controls in business processes. Also, grouping of risks has been undertaken for better management control.

The Company was also awarded ISO 31000:2009 Statement of Compliance for Enterprise Risk Management System from British Standards Institute (BSI) for its Enterprise Risk Management System.

Business Ethics

Tata Power adheres to the TCoC which is a comprehensive document with an ethical road map for Tata employees, companies, including third parties. TCoC consisting of 25 clauses, includes codes to be followed in financial disclosures, addressing national interests, political nonalignment, health, safety and environment, corporate citizenship, ethical conduct, anti-corruption. The Code is a dynamic document that reinforces the Tata canon of honourable behaviour in business. TCoC also forms a part of all the investment and contract agreements. Tata Power also has a Human Rights Policy which is applicable to the entire organisation and its operations. During the reporting period there were no instances of noncompliance and demonstration of any anti-competitive behaviour, anti-trust and monopoly practices in the Company and no fines incurred from any regulatory body.

Tata Power is committed to support the constitution and governance systems of the country in which it operates. Tata Power does not support any specific political party or candidate for political office. No monetary benefits were provided in any form to any political party. Tata Power complies with all the statutory requirements of the location in which it operates. The Senior Leadership Team (SLT) of Tata Power reinforces the ethical culture through the guiding clauses of the TCoC in communications to all stakeholders. The Apex Committee of Ethics chaired by MD, comprises of the ED and other senior leaders who regularly monitor the functioning of the ethics structures, and

²https://www.tatapower.com/investor-relations/pdf/97Annual-Report-2015-16.pdf

provide thought leadership. Chief Ethics Officer and Local Ethics Counsellors (LEC), help drive the culture of ethics. The Apex Committee on Ethics meets once every six months, to provide guidelines for the implementation of TCoC and resolve ethical concerns. The Chief Ethics Counsellor meets up with the Chairman, Ethics Executive Committee every quarter, to review the status of Ethical concerns received, and actions taken. As a part of the compliance by the governing body, TQMS, the MD submits an annual declaration on Business Ethics to the Chairman of the Tata Group. Every year, Ethics Week is celebrated in the month of March, to drive an ethical culture across the organisation. Communication on ethics is given high importance and this is carried out through LECs throughout the year.

In the reporting year, Tata Power was awarded "World's Most Ethical Company" by Ethisphere Institute for second consecutive year. Ethisphere Institute is an independent centre of research in USA, which promotes best practices in corporate ethics and governance.

In the reporting year, total 89 concerns (complaints) were received from employees, vendors and society and all the concerns have been resolved. Out of 89 concerns 32 were anonymous concerns. There was one POSH related concern and resolved within 90 days. Majority of the concerns received were related to the TCoC clauses on ethical conduct and equal opportunities. In 2015-16, there were 8 concerns reporting incidents of corruption and out of these one case was genuine and suitable disciplinary action has been taken against the employees. There were no complaints on discrimination, Child labour, forced labour, freedom of association and right of collective bargaining, HuR etc. In the reporting year, there have been no incidents of violation of rights of indigenous people. TCoC is communicated to all the members of the governance body.

Public Policy Advocacy

Tata Power has articulated its position on advocacy. Tata Power interacts with various institutions/non-government organisations, industry associations, and chambers, etc. to be updated with the current scenarios related to industry as and also put across its position. The Company is a member of various institutions which are provided below.

- National Safety Council (NSC)
- Electrical Research and Development Association
- Association of Power Producer (APP)
- Confederation of Indian Industry (CII)
- IMC Chambers of Commerce and Industry
- The Institute of Internal Auditors
- Indian Energy Exchange.

The CEO & MD is also the member of following Committees/Boards:

- India Energy Exchange Member Advisory Board
- CII Chairman National Committee on Power
- IMC Chair Environment and Energy Committee
- UN Women Member of the Business Sector Advisory Council
- SAP Member Executive Advisory Board
- Member Task Force on Public Private Partnership, Planning Commission, Government of India (Gol)
- Member Industry Joint Task Force, Ministry of Commerce and Industry, Gol

Tata Power does not lobby or use its positions/membership in trade associations, professional bodies to lobby in its interests. In all these fora, Tata Power and its representatives articulate and advocate views that are in common interest. Tata Power does not contribute, in kind or cash, to any political party and during the reporting period, no financial transactions or in-kind contribution made directly or indirectly to political parties.

Sustainable Business



Management Approach

Sustainability as a practice is intricately weaved into every function of Tata Power in a way that addresses the interest of all its stakeholders and the society at large. Tata Power has adopted sustainability model 'Leadership with Care' which streamlines the Company's commitment towards Care for major stakeholders. The Company is well compliant with the UNGC principles, SDGs as well as National Voluntary Guidelines for Corporate Social Responsibility which is the core of BRR of SEBI and submits its performance report annually.

Sustainability Governance

In a unique governance approach for Sustainability, Tata Power has set up the Sustainability Advisory Council (SAC), where apart from Tata Power senior management, the ex-MD and two independent Board members, the council also includes national and international members of civil society who are experts in the fields of environment protection, biodiversity conservation, climate change and community relations. The SAC's role is to challenge the organisation's strategies on these issues and also guide Tata Power to formulate improved approaches. Topics pertaining to technology upgradation, global best practice, preparedness for future regulatory regime, Community & Biodiversity initiatives and sustainability strategy are discussed in SAC.

The Company has a defined Sustainability policy and has laid down processes to monitor the same. Further, the Corporate Sustainability Committee (CSC) is responsible for driving sustainability in the organisation, has defined processes and prepares, monitors and reviews action plans that emerge out of SAC. The divisional committees, comprising of divisional champions drive the action plans. The CSC at the Corporate level drives the agenda of 'Leadership with Care', and there are Divisional Sustainability Committees (DSC) at all generating stations,

driving the Sustainability performance at grass root level across stations. The performance of CSC is reviewed half-yearly and future strategies are chalked out. At the Divisional level, monthly reviews are conducted to ensure that the Company cruises smoothly on the Sustainability journey. So in order to ensure the optimum level of performance on Environment, Social and Sustainability front, the Chief Sustainability Officer (CSO) reviews the performance of the stations for Environment and CSR activities monthly. Tata Power communicates its progress on the four pillars of Leadership with Care, to stakeholders by sharing the update in the public domain, at regular intervals.

Sustainability Governance Structure

Board of Directors

MD & CEO (Chairman, SAC)

Sustainability Advisory Council

- Senior Management, the ex-MD and 2 Independent Board members
- Members of civil society expert in various areas of Sustainability

Challenge the organisation's strategy on sustainability issues
Guide company to formulate improved approach

Corporate Sustainability committee

Defines processes and prepares, monitors and reviews action plans that emerge out of SAC and reports back to SAC

Divisional Sustainability committee

Drive and implement the action plans and reports status to SAC

Sustainability Strategy

The sustainability strategy mainly focuses on goals for reduction of carbon footprint, conservation of biodiversity and natural resources, clean and efficient technologies and stronger renewable portfolio. Tata Power is using low ash and low sulphur coal for its current operations, to minimise adverse impacts on the environment. The periodic interactions with communities and community need assessment survey are the instruments in developing community investment plans.

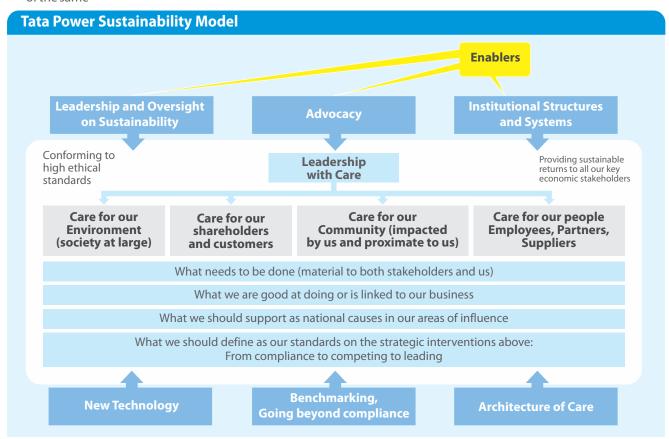
The Sustainability Strategy for Tata Power is aimed at ensuring that Tata Power conducts its business in a manner that is socially, environmentally, economically and culturally sustainable, thereby not only benefitting the society within which it operates, but also creating, in the long term, a competitive advantage over other players. The Sustainability Strategy is intended to help set aspirations and levels of commitment along the key elements of sustainability. It is deployed across the value chain of the organisation and covers all relevant geographies where Tata Power operates. The key elements in the Tata Power context are:

- a) Economic well-being and prosperity of the organisation, its shareholders-both today as well for the future
- b) **Environment** and **Ecological** impact of the organisation's activities and reduction and mitigation of the same

- c) **Social** impact of the organisation's activities on its stakeholders (communities around the plant; people working in the plant, etc.)
- d) **Cultural** focus to help individuals connect to ethics and moral values. This is an important element to drive behaviour in an organisation and to help embrace sustainability across all dimensions.

Sustainability Model

At Tata Power, it is believed that growth and development are imperative for a developing economy. However, it needs to be sustainable and must benefit the stakeholders in the long run, with least impact on the environment. Tata Power embodies the Tata Group's philosophy of building a strong Sustainable business that is firmly rooted in the concept of benefit sharing and demonstrates Leadership with Care. Tata Power has instituted 'Care' as one of the core values which entrust Care for Environment, Care for Community, Care for Customers, and Care for People, i.e. employees, shareholders, suppliers, partners, etc. in the sustainability model. The Sustainability Model aims at strengthening structures and processes for environmental performance, stronger engagement with community, customers and employees, by using enablers like new technology, benchmarking and going beyond compliance in key operational parameters.



Sustainability Policies - The Policies and Model for Sustainability emanate from the Tata Philosophy based on the powerful and benevolent visions of the founders. These policy statements are available at Tata Power website⁴.

- Sustainability Policy
- Environment Policy
- Energy Conservation Policy
- CSR and Volunteering Policies
- Safety & Health Policy
- E-Waste Management Policy
- PRADAAN Employee Volunteering Booklet
- HIV AIDS Policy
- Advocacy Policy
- Human Rights Policy
- Responsible Supply Chain Management Policy

Sustainability Recognition

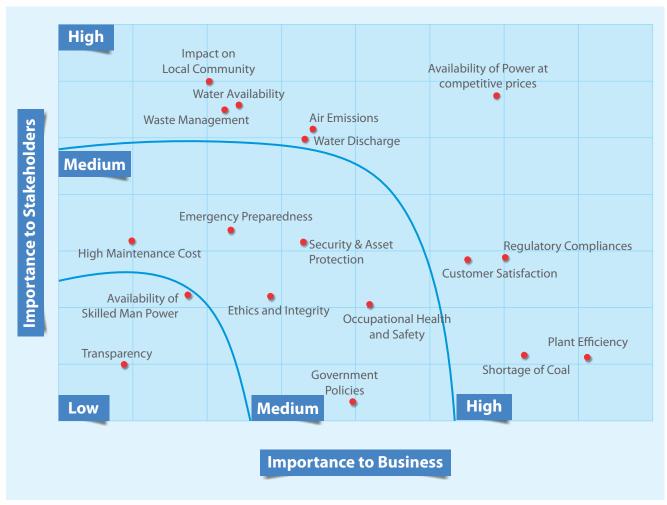
Tata Power has been recognized as one of India's most sustainable companies with the Sustainable Plus Platinum Label for FY 2015. The company has received a highest Sustainability Rating 'A' for its Sustainability performance according to a new assessment done by CII.



Materiality Assessment

Management Approach

Tata Power has always been vigilant about the Material issues for business and the involvement of Stakeholders in the process of identifying them. The first Stakeholder Engagement and Materiality assessment (SHM) was conducted in FY 11 with the help of a third party consultant. With the changing regulatory scenario, dynamics of the power sector and upgrade in reporting requirements in the form of GRI G4 guidelines, Tata Power revisited SHM study in 2015 with the help of globally acclaimed consultants. The process and outcomes were discussed in company's sustainability report for 2014-15. A snapshot of the result is presented below.



⁴https://www.tatapower.com/sustainability/policies.aspx

Outcomes

Ten material aspects for Tata Power are given below and these are addressed in the report in relevant sections.

Sustainability	Aspect	Impact o	f the aspec	t in the va	lue chain
Value	лэресс	S	G	D	C
Care for Environment	Emissions to Air	M	Н	-	-
	Water Availability	L	Н	-	-
	Effluent Discharge	L	L	-	-
	Waste Management	L	M	-	-
	Regulatory Compliance	Н	Н	L	L
Care for Community	Impact of Local Community	M	L	L	M
Care for Customers	Availability of power at Competitive rates	L	M		Н
	Customer Satisfaction	-	Н	Н	Н
	Fuel Availability	Н	Н		
	Plant Efficiency	-	Н	-	-

Value chain stages: S - supply chain, G - generation, D - distribution, C - consumer/end user, Impact: H - high, M - medium, L - low

Stakeholder Engagement

In line with the identified major stakeholders of Tata Power various activities that were conducted during this reporting year to address the stakeholder requirements are elaborated below.

Community

Model Village: Tata Power has been continuously undertaking sustainable development initiatives to improve the quality of life and social well-being of the communities where it operates. In line with this vision, the Company initiated the holistic approach based "Model Village Development Program" in 2015, aimed at helping rural communities become sustainable and self-reliant across 56 villages of the country covering Maharashtra, Odisha, West Bengal, Jharkhand and Gujarat in phased manner.



The objective of the initiative is to augment additional income sources by bringing villages to the mainstream of the development process, targeting key prioritised issues, and addressing them through collective engagement of key stakeholders, thereby, enabling the local communities to become self-sustaining. The first phase, i.e. 2015-2017,

has been implemented across 10 select locations including Mundra, Maithon, Trombay, Dharavi, Kalinganagar, Haldia, and Jojobera amongst others. The programs implemented here aims at enhancement of the economic cycle through an objective selection of villages based on the community consultation, establishment of grass root level functionaries, social mobilisation, improving access of existing government schemes and projects, identification and promotion of social entrepreneurs to create job based growth at the village level.

Tata Power Skill Development Institute (TPSDI)

To bridge the competency gap in the power sector. Tata Power has established the TPSDI as a non-profit corporate social responsibility initiative in its centenary year. TPSDI is mandated to provide modular training and certification in the Power Sector and allied skills leading to employability. TPSDI being a Corporate Social Responsibility initiative will complement the efforts of Government of India and other State Governments.



TPSDI will provide training and certification to create a competent and skilled workforce in the power sector and allied areas. TPSDI will empower people with learning for livelihood and help skilled people to pursue growth

opportunities within the entire chain of Power Utilities Skills. TPSDI training approach ensures the holistic development of trainees. Every course offered a composite built of many building blocks including: Cognitive skills, Functional, Technical Knowledge and Soft Skills and Personality Development. To cater to all India requirements for skill development, centres have been established at Shahad, Trombay, Mundra and Maithon. Tata Power has planned to have all Services workforce to be TPSDI certified. Accordingly, targets have been set for contractor workforce certification of at least 25% by FY 2017, 50% by FY 2018 and 100% FY 2019.

Suppliers

Responsible Supply Chain Management: Policy displays the Company's commitment towards sustainable supply chain operations and emphasises to all its stakeholders that it would be prudent to follow the RSCM policy to have mutual success.

The sustainable supply chain guidelines are cascaded to all the stakeholders in the supply chain. The Company shares with its suppliers/contractors documents like Tata Code of Conduct, Environment Policy, RSCM, Sustainability Policy and Contractors Safety Code of Conduct that form an integral part of the Enquiry Documents (RFQ/RFP) for making them aware of Tata Power's commitments towards its adjacent community and stakeholders at large. This is comprehensively integrated at the time of contract award by making it a part of each Purchase/Work Order. The Company has also revised its vendor

Resolutions and mutual agreement for the continual focus on sustainability are crucial for mutual business sustenance and hence it is periodically discussed and reviewed with key stakeholders annually.

Shareholders

The shareholders are kept updated on the important milestones and announcements via news papers, news releases and presentations, company website (web based queries under Investor Relations, SEBI Complaints Redress System and factory visits etc. The Annual General Meeting (AGM) is held each year to keep the shareholders informed and company also publishes its annual report and BRR.

Customers

Social Networking: With time, the communication approach has also transformed, only to cater to a wider audience. Embracing social media marketing is one such change to not just promote the products, but also receive customer feedback on the same. Facebook and Twitter are the online communication channels used by Tata Power for social networking. In addition to the above, Customer Talk – a monthly magazine is circulated internally that elaborates on the progress made by the Distribution segment of Tata Power.

Be Green - A unique consumer initiative where Tata Power's consumers could exchange their old, inefficient electrical appliances for new, 5 star rated energy efficient



impanelment guidelines to screen the suppliers on safety and environmental performance parameters, in addition to existing commercial criteria through the ERP platform.

The company also took up few supplier development initiatives under the affirmative action, such as:

- Promoted 240 community entrepreneurship ventures like fly ash brick making, poultry farming, garment manufacturing, etc.
- Outsourced ₹17.65 crore of products and services from 36 vendors/contractors.

Partners Meet - Tata Power conducts Partners Meet to discuss various issues, business scenarios, concerns and other information pertinent to the business every year. During regular events, the Company and its partners/suppliers share their views and concerns.

appliances at a discounted price. During 2015-16, company provided 15.5 lakh LED bulbs to its customers in Mumbai and Delhi and also facilitated the replacement of nearly 20,000 inefficient appliances such as old fans, air conditioners etc. with new star rated energy e¬fficient ones. Also, for the large industrial and commercial consumers, the company carried detailed energy audits at a discounted price.

Club Enerji - Tata Power's Club Enerji is focused on school students to champion the noble cause of conservation of resources and moral and civic values. The Company has further scaled up the magnitude of this initiative by launching an online module of the Club Enerji programme. The objective of this initiative was to reach out to a larger audience and impact a larger group of IT skilled children

with a vision to transform by adopting a holistic and robust approach towards conservation. The module, since its launch, has also reached out to audiences in new international geographies like Philippines, UAE, USA, UK and South Africa and newer national geographies like Chandigarh, Hyderabad and Chennai.

Employees

Tata Power encourages its employees to actively participate in the forums created at the Tata Group level like Tata Innoverse and Tata Innovista⁵ (an annual celebration of the innovation effort in the Tata group). Tata Power was one of the early companies to join Tata Innoverse and leveraged the resource available by consistently posting some of its critical challenges in this group forum.

Tata Power encouraged employee volunteering through its Arpan initiative. Various volunteering programs were also organized at Jawhar (a district in Maharashtra), where Tata Power runs Affirmative Action (AA) programs. These include implemented several initiatives for Employment, Entrepreneurship, Employability, Education and Essential Amenities for the communities around its operating sites.

Srijan - An organisation wide initiative where employees are involved in redrafting and co-creating all HR policies. It enables employees to understand, co-create and co-own HR policies resulting in better acceptance and dissemination.

Media

The company has maintained professional relationship with media and the information shared is managed under the Media Relation Policy. The various news bites are shared routinely with media on company website in form of press releases for wider circulation and information of the relevant stakeholders.



⁵The Tata InnoVerse Program is an endeavour to bring together innovators, scientists and academicians from across the globe to solve some of the toughest challenges facing us and the world, www.tatainnoverse.com/page.php?id=3



Tata Power recognises that its people are a key resource and endeavours to enable its employees to deliver on business requirements while meeting their career aspirations. Human resources plays a pivotal role in enabling smooth implementation of key strategic decisions through aligned capability development, leadership development, diversity and industry relation practices.

Tata Power has various employee engagement initiatives coupled with enhanced focus on individual training needs that is aligned to help Company achieve its vision of Employer of Choice. It also maintains policies for various facets of Human Resource Management, which highlights its commitment of being an employee friendly organisation. There are processes in place for recruitment and selection of personnel at all levels, well defined manuals for induction, performance management, learning and development, retirement, and separation.

Tata Power engages its employees on continuous basis through various initiatives such as HR100+, Town Halls, Newsletters, Cascading the Strategic Intent, Communication from the MD's Desk, MD's Communication Meet, Enerji TV, HR Connect, Forum with Top Leadership, Forum with HR (VOICES), Employee Engagement Surveys and Engagement Action Planning, Shikhar Awards, and Appraisal Step Redressal (ASR) Process etc. The employee engagement score conducted for Officers determined through Aon Hewitt survey in FY16 was 74% as against the 69% in FY15. This is above the industry average of 67% and is a sector benchmark in India.

The various initiatives taken up for the employees development are as follows.

Capability Development

To enhance technical and functional excellence of its employees, Tata Power provides environment where continuous learning takes place. This will help employees and the company in turn to meet the changing demands and priorities of the business including emerging businesses and geographies. The company has developed a structured mechanism to support people development as described below:

- Competency/Learning levels for various roles are regularly evaluated and established
- Individual level gaps are identified through an assessment mechanism or PMS cycle (Training Need Identification)
- Training needs fulfilled through relevant and best in class interventions
- Job rotation opportunities discussed and enabled
- Company established Tata Power Skill Development Institute (TPSDI) for addressing the skill gap in power and allied sectors by training incumbents in the community.

Leadership Development

Tata Power has a Leadership Development Framework which caters to the developmental needs of senior leaders and key employees in its talent pool to meet these needs. Leaders undergo various programs like the Tata Group Induction for Business Leaders (new joinees), Tata Group Strategic Leadership Seminar (TGSLS), Tata Group Executive Leadership Seminar (TGELS), Tata Group emerging Leaders Seminar (TGELS) and Tata Group Management Development Program (TGMDP). Senior leaders are nominated to Cambridge Sustainability Leadership Program, Spokesperson Media Training, Market segmentation, Safety conference, Enterprise Risk Management, Tata Group Learning Mission and the World Utility Summit. Periodic nominations are made to best in

class external leadership programs offered by TMTC, IIMs, XLRI, ASCI, and CII as also to the 3 module in-house flagship programs - STEP (Strategic Training for Employees' Progress), EDP (Executive Development Program) and MDP (Management Development Program).

Talent Retention

Tata Power believes that retaining talent gives a competitive advantage in a fast evolving and challenging business environment. Meritocracy is the central theme for all employee life cycle processes like Recruitment, Performance Management, Rewards & Recognition, Career Growth and Exit Management. Planned interventions are carried out across all levels of management to identify and retain the right talent. Some of these interventions includes, Accelerated Career Enhancement (ACE) - a fast track talent management programme, identification of High Potential o-fficers for further development, succession management, Myfeedback - a developmental tool for senior and top management to enable them to obtain developmental feedback whereby learning and development can be initiated by self or aided by the organization and Management Planning Discussion - a career planning exercise for senior management. The Company has held its attrition rate below 4% for the past four years. The minimum entry level wage is well above the minimum wage in industry. All the employees receive annual career/ performance review. There is no discrimination in recruitment and promotions based on gender, race, religion, ethnicity etc.

Diversity

Tata Power is an Equal Opportunity Employer in all practice areas. Around 35 senior leaders underwent Diversity and Inclusion workshops to ensure that the organizational agenda percolates from the apex leadership and pervades smoothly throughout the organization. In FY16, 19 workshops were organized covering around 400 employees for sensitization of employees towards promotion of workplace diversity in addition to cultural sensitivity trainings, community outreach and cultural celebrations at work.

Also, in line with Tata Group's vision to create 1,000 women leaders by 2020, the company has been promoting gender diversity within the Tata Power Group of companies through focused interventions like International assignments for women, specially designed LDPs for women colleagues, MD's Dialogue with women employees to encourage women participation in various forums and to address their concerns and challenges and International Women's Day

Celebrations. Additionally, the induction and on boarding of new joinees included direct communication on key themes such as TCoC, Prevention of Sexual Harassment at work and mutual respect towards colleagues irrespective of their cultural and social background.

Industrial Relations

Cordial relations exist between Management and Union based on mutual respect and understanding which allows for smooth and uninterrupted functioning of your Company. Meetings were held periodically between Management and Union to discuss various issues and the Union is consulted on all significant changes. For all operational changes, the company in consultation with the person concerned, gave a minimum notice period and followed legal requirements. Agreements with the Union have been signed for four years covering aspects related to health and safety, salary, allowances, benefits and productivity clauses, in line with the business requirements. Company has a robust legal compliance monitoring system for labour laws which is reviewed by top Management.

Labour Management Relations

Tata Power respects the rights of employees to exercise freedom of association as per applicable Trade Union Laws. In the reporting year 26% of the permanent workforce was from the non-management cadre, which is an internal Union with no political or external affiliations. The Union is consulted by the Management on all significant changes through regular meetings with management. There have been no grievances filed about labour practices through formal grievance mechanism. All of the (100%) employees are covered under Collective bargaining agreements. There are no unionised employees in SED, Mundra and Maithon.

EmployeeWellbeing

Tata Power believes that work-life balance is about creating and maintaining a supportive and healthy work environment, which enables employees to have a balance between work and personal responsibilities. The Company offers range of benefits to the employees like Life Insurance, Health Care, Disability/Invalidity coverage, Maternity leave/ Adoption leave, Retirement provision, Housing benefits, Car benefits etc.

Parental leave & return to work

Tata Power	
	2015-16
Employees that availed parental leave during the year	18
Employees due to return from parental leave during the year	22
Employees who returned to work during the year after end of parental leave	9
Employees retained for 12 months after resuming from parental leave	2
Employees due to return to work after taking parental leave	8
Return to work rate	41%
Retention Rate	100%
SED	
Employees that availed parental leave	2
Employees returned to work and retained for 12 months after resuming from parental leave	2
Retention Rate	100%

Workforce Snapshot

Tata Power has 4,068 employees where in female and male workforce accounts for 338 and 3,730 respectively. The details of total workforce by employment categories for Tata Power (including IEL, Mundra and Maithon), and SED for FY 2015-16 is given below. All the employees are local to respective location (local taken as country of plant location).

Tata Power	2013-14					2014-15				2015-16								
Employee Category	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total
Senior Management	225	9	1	104	129	234	242	12	2	110	142	254	243	13	1	110	145	256
Middle Management	374	20	9	304	81	394	392	18	5	315	90	410	403	19	3	324	95	422
Junior Management	2,125	240	1,276	910	179	2,365	2,069	249	1,147	998	173	2,318	1,975	245	944	1,111	165	2,220
Workmen	1,182	26	25	548	635	1,208	1,097	25	20	487	615	1,122	1,026	22	14	434	600	1,048
FDA	87	40	76	40	11	127	88	42	73	52	5	130	83	39	60	58	4	122
Total	3,993	335	1,385	1,906	1,035	4,328	3,888	346	1,247	1,962	1,025	4,234	3,730	338	1,022	2,037	1,009	4,068

SED			2013	3-14					201	4-15					201	5-16		
Employee Category	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total
Senior Management	16	0	0	8	8	16	0	16	0	0	8	8	16	0	0	8	8	16
Middle Management	182	22	9	157	38	204	182	22	9	157	38	204	235	22	7	192	58	257
Junior Management	288	69	207	128	22	357	288	69	207	128	22	357	448	122	351	194	25	570
Workmen	15	0	0	1	14	15	-	15	0	0	1	14	0	0	0	0	0	0
FDA	-	-	-	-	-	-	16	-	-	2	14	16	16	0	0	1	15	16
Third Party Contract (Outsourced)	192	0	165	47	6	218	177	27	134	64	6	204	189	18	128	70	9	207
Others (Trainees/App rentice)	6	26	6	0	0	6	-	6	0	6	0	0	9	1	10	0	0	10
Total	699	177	387	341	88	816	699	177	387	341	88	816	913	163	496	465	115	1076

Employees Hired

Tata Power ensures significant attraction and retention of employees, primarily backed by a robust talent management strategy of offering diverse experiences and challenges across varied projects. In FY 2015-16, the total number of employees hired by Tata Power and SED is given below.

Tata Power			2013	3-14					2014	4-15					201	5-16		
Employee Category	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total
Senior Management	9	-	0	8	1	9	14	1	0	8	7	15	10	0	0	3	7	10
Middle Management	19	-	1	18	-	19	16	0	1	15	0	16	6	2	0	6	2	8
Junior Management	144	25	121	48	0	169	103	30	104	29	0	133	55	21	61	15	0	76
Workmen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FDA	-	-	-	-	-	-	19	6	11	13	1	25	8	7	7	8	0	15
Total	172	25	122	74	1	197	152	37	116	65	8	189	79	30	68	32	9	109

SED	2013-14					2014-15				2015-16								
Employee Category	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total	M	F	<30	30- 50	>50	Total
Senior Management	0	0	0	0	0	0	3	0	0	1	2	3	0	0	0	0	0	0
Middle Management	4	0	0	2	2	4	14	2	2	14	0	16	29	0	1	25	3	29
Junior Management	40	10	39	11	0	50	51	22	59	12	2	73	187	43	185	45	0	230
Work Man	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	44	10	39	13	2	54	68	24	61	27	4	92	226	43	186	70	3	250

Employee Turnover

The turnover and its percentage by workforce level of Tata Power and its subsidiaries/divisions are elaborated below. The turnover rate does not include superannuation, death, group transfer cases, etc. and considers only resignation cases. The average tenure consists of experience of employees in Tata Power.

Tata Pow	er		201	4-15		2015-16								
Turno	ver	Workforce level	Senior Management	Middle Management	Junior Management	Workmen (Union)	FDA	Total Employees	Senior Management	Middle Management	Junior Management	Workmen (Union)	FDA	Total Employees
Turnover	Gender	Male	1	12	98	0	1	12	8	10	89	1	8	116
		Female	0	0	16	0	0	0	0	0	21	0	4	25
	Age	<30	0	1	79	0	0	1	0	1	82	0	8	91
		31-50	0	11	35	0	0	11	5	8	28	0	4	45
		>50	1	0	0	0	1	0	3	1	0	1	0	5
		Overall	1	12	114	0	1	12	8	10	110	1	12	141
Turnover %	Gender	Male	0.4%	3.1%	4.7%	0.0%	0.4%	3.1%	3.3%	2.5%	4.4%	0.1%	9.4%	3.0%
		Female	0.0%	0.0%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	0.0%	9.9%	7.3%
	Age	<30	0.0%	14.3%	6.5%	0.0%	0.0%	14.3%	0.0%	25.0%	7.8%	0.0%	12.0%	8.0%
		31-50	0.0%	3.6%	3.7%	0.0%	0.0%	3.6%	4.5%	2.5%	2.7%	0.0%	7.3%	2.3%
		>50	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%	2.1%	1.1%	0.0%	0.2%	0.0%	0.5%
		Overall	0.4%	3.0%	4.9%	0.0%	0.4%	3.0%	3.1%	2.4%	4.8%	0.1%	9.5%	3.4%
Average Ten leaving (in y		ployees	2.67	5.69	3.40	0	0.97	3.42	6.25	5.28	4.49	29.84	2.31	4.64

SED		201	4-15				201	5-16	
Turnover	Workforce level	Senior management	Middle management	Junior management	Workmen (Union)	Senior management	Middle management	Junior management	Workmen (Union)
Gender	Male	0	7%	93%	0	7%	2.55%	12.05%	0
	Female	0	0	7%	0	0	13.63%	11.47%	0
Age	<30	0	0	93%	0	0	43%	17%	0
group	30-50	0	67%	7%	0	0	4.16%	3.60%	0
	>50	0	33%	0	0	14%	0	0	0

Employee Retirements

The employees superannuating in the next 5 to 10 years respectively is provided below.

Tata Power	Next	5 years	Next 10 years			
Workforce Level	Male (%)	Female (%)	Male (%)	Female (%)		
Senior Management	33%	23%	63%	46%		
Middle Management	9%	0%	10%	0%		
Junior Management	13%	2%	15%	2%		
Workmen (Union)	59%	2%	58%	2%		

SED	Next 5	years	Next 10 years				
Workforce Level	Male (%)	Female (%)	Male (%)	Female (%)			
Senior Management	21%	0%	36%	0%			
Middle Management	4%	9%	18%	9%			
Junior Management	2%	0%	7%	1%			
Workmen (Union)	0%	0%	0%	0%			

Employee Training

Tata Power	2015-16						
Employee Training	M	F	M	F			
Linployee Halling	In H	ours	Avg. I	Hours			
Senior Management	5715	250	24	19			
Middle Management	25711	1652	64	87			
Junior Management	93945	11539	48	47			
Workmen	31871	538	31	24			
FDA	1331	284	16	7			

SED	2015-16						
Employee Training	M	F	M	F			
Employee framing	In Hours		Avg. I	Hours			
Senior Management	9	0	0.56	0			
Middle Management	321.15	46.5	1.37	2.11			
Junior Management	864.62	228.56	1.93	1.87			
Workmen	0	0	0	0			
Fixed Term Contract	222.5	0	13.91	0			

The training details are reported for 1 July 2015 to 30 June 2016 cycle to match with the internal training calendar. Monthly average 39 security personnel trained, 24 people trained in HR aspects and total 317 training hours (monthly average = 26.42 hours).

Care for Environment



CARE for environment is part of Tata Power's **Sustainability Model**, i.e. *Leadership with Care*. Tata Power has been meticulously working towards resource efficiency, adoption of advanced clean technologies and protecting vital species and habitats. The approach is grounded with a commitment for 100% compliance on all environmental requirements wherever the company is operating.

Environment Management and Responsibility

Tata Power's commitment to environmental stewardship stretches across its entire energy value chain. The activity includes from sustainable resource conservation through efficient operation and Demand Side Management (DSM) programmes. The governance structure at Tata Power for environment management is reinforced with the CSO office being responsible for Environment, Corporate Social Responsibility, and Biodiversity.

In addition, Tata Power aligns with various voluntary initiatives and compliance requirements such as UNGC principles on environment, NVGs, BRR, CDP etc. As an environmentally proactive responsible corporate, environment management consideration starts at the conceptual stage of all the company's projects. It is given top priority through the commissioning, execution and it continues into operation as well. Effective pollution minimisation and control and monitoring mechanisms are in place at all the projects. Few examples of these are Air Pollution Control Equipment (APCE), wastewater treatment plants and ambient & stack emissions, noise levels etc. Effective monitoring is also carried by accredited third party agencies, on a periodic basis.

Environmental Grievance Mechanism

This mechanism is within the ISO 14001 Environmental Management System to handle complaints/grievances

from internal and external parties. The stakeholder's complaints regarding environmental issues that may affect the Company's reputation are escalated to the Top management.

Environmental Expenditure

The environmental expenditure is identified at the conceptual stage and O&M is allocated on a year on year basis to develop effective environmental programmes. This FY15-16, Rs. 592 million was spent on various environment protection and pollution abatement and monitoring measures.

Compliance Management

The environmental policy and governance practices are designed to ensure regulatory/statutory compliance, as well as to provide a platform for environmental performance to go beyond the legal and regulatory limits. A robust compliance management system is in place to review the environment compliance by the top management, as well as departmental heads at a defined frequency.

The COO and Executive Director monitors the environment compliance through a Daily Environment Dashboard which covers mainly incidents and exceptions to environmental norms and conditions stipulated by State Pollution Control Board (SPCB). An environment compliance certificate is also submitted to SEBI along with other requisites as part of section 49 of SEBI guidelines. The CSO reviews the environment performance of all thermal stations on a monthly basis, whereas the wind, hydro and waste-heat recovery projects are monitored quarterly. An integrated central reporting system DISHA is in place for monitoring all Environmental parameters as per Consent to Operate (CTO) issued by the respective SPCBs. Internal Audits are carried out by the Corporate Environment and

Climate Change Team with a defined frequency across all generating stations. In this reporting year, no notice about exception or non-compliance to any of the operating stations has been issued.

Environment Sustainability

Tata Power continues to implement activities which focus majorly on resource conservation, waste minimisation, energy and water conservation. These initiatives are tracked through **Green Manufacturing Index** (GMI) at the station level. The GMI is tracked on a quarterly basis for all operating locations by the MD during the Balance Score Card (BSC) review and by the CSO monthly during the environment reviews. GMI is a quantitative matrix of baseline, target and achievements on various environment initiatives such as specific water consumption, zero effluent discharge, utilisation of scrap, bottom ash utilisation, plantation, rainwater harvesting, energy conservation, etc. GMI targets along with results achieved by stations are given below.

Green Manufacturing Index											
Division	Target	Actual									
Trombay	24	24									
Jojobera	28	25									
Maithon	26	48									
Mundra	86	91									
Haldia	45	58									
Bhira	24	15									
Bhivpuri	39	39									
Khopoli	40	30									
PH 6	42	64									
Transmission	36	43									
Tata Power Consolidated	39	44									

Material Consumed and Recycled

At Tata Power, the major material consumption is fuel (coal, oil, gas), which is used for generating electricity. Tata Power does not use Ozone Depleting Substances (ODS) in any of its operations. The materials consumed by Tata Power's generating units are given below.

Materiai Consumption											
Station	Material (Tonnes)	FY 13-14	FY 14-15	FY 15-16							
Trombay	Coal	2,557,512	1,997,053	2,704,951							
	Low Sulphur Heavy Stock (LSHS)	43,169	23,196	2,321							
	Gas	288,934	353,872	206,828							
Jojobera	Coal	252,4507	2,703,715	2,587,908							
Mundra	Coal	11,495,860	9,875,599	9,970,026							
Maithon	Coal	4,032,486	3,989,477	4,092,996							
PH # 6	Blast Furnace Gas (MNm³)	2,566	2,522	2,483							

Haldia is excluded as it is uses waste flue gas as a material. There is no significant material consumption in Hydros.

Air Quality

Tata Power is aware of the potential health impacts due to air emissions of Sulphur Dioxide (SO₂), Nitrogen Oxides (NOx) and Particulate Matter (PM) which are emitted during electricity generation. Online CEMS (continuous emission monitoring system) analysers installed on stacks for continuously measuring of pollutants across locations and periodically monitoring are carried out through third party laboratories authorised by statutory agencies. Emissions across Tata Power locations are well within stipulated limits. The emissions are monitored as per the approved procedures of regulatory authorities. As an environment conscious company, none of the operations emit Polychlorinated Biphenyl (Persistent Organic Pollutants, POP) as well as Volatile Organic Compounds (VOC). The emissions in tonnes are given below.

Air Emissions by Weight (tonnes)							
Parameter	Year	Trombay	Jojobera	CGPL	MPL		
SO ₂	FY 13-14	6,320	15,059	23,209	27,283		
	FY 14-15	4,366	16,547	55,226	30,978		
	FY 15-16	5,577	16,433	82,599	25,149		
NOx	FY 13-14	4,449	2,120	40,612	9,125		
	FY 14-15	511*	2,133	34,823	10,279		
	FY 15-16	5,234	3,182	25,939	13,634		
PM	FY 13-14	1,360	525	3,187	1,242		
	FY 14-15	1,159	522	2,920	1,105		
	FY 15-16	1,103	824	3,142	1,324		

No emissions from Hydro, Haldia and PH6 due to use of water and waste gas for power generation respectively. * only unit 7 of Trombay

Ambient Air Quality - Ambient air quality is typically measured at atleast three locations, near ground level, away from direct sources of pollution. Tata Power monitors ambient air across locations around all operating stations. Continuous Ambient Air Quality Monitoring Stations (CAAQMS) are installed in operating locations. Also the monitoring is carried out by third party authorised laboratories. The measurements are sent to the respective SPCBs on a monthly basis as well as to the regional offices of the MoEFCC along with the six monthly compliance reports. The ambient air quality is monitored at all locations and is well within the statutory compliance levels (except for PM) and deviations are observed mainly due to local atmospheric conditions.

Greenhouse Gas Emissions

One of the important sustainability efforts is to reduce the greenhouse gas (GHG) emissions which arise from the use of fossil fuels (coal, oil and gas) for electricity generation. At Tata Power, as a commitment towards combating climate change, emissions are tracked regularly and assessment carried out on a yearly basis as per the World Business Council for Sustainable Development (WBCSD) guidelines and GHG protocol.

CO₂ Intensity (g/kWhr)							
Year	Trombay	Jojobera	Mundra	Maithon	Total for Tata Power		
FY 13-14	833	883	824	869	759		
FY 14-15	824	923	785	885	747		
FY 15-16	883	945	781	958	773		

Excludes Haldia, PH#6 and Hydros as they do not contribute to any significant CO₃ emissions. Power generation from solar and wind projects have also been considered while calculating GHG intensity

Further, as a part of its voluntary disclosures, the GHG emissions are reported to CDP, UK and the details as per Scope I, II and III are as follows.

United Nations Framework Convention on Climate Change (UNFCCC). Tata Power currently has five of its renewable projects registered under the CDM program by UNFCCC. These projects include Wind projects at Gadag (Karnataka), Khandke (Maharashtra), Samana and NewGen Saurashtra (Gujarat). The Company also has Mithapur Solar project registered under CDM. In FY 2015-16, total of 1,15,249 Carbon Credits (CERs) were traded from these projects combined. The gross revenue generated from such sale is ~ INR 10.66 Crores.

Also, the company's Joint-Venture of 120 MW Itezhi Tezhi Hydro Power Project in Zambia has received CDM approval from UNFCCC. The total emission reductions from the project are estimated to be 5,892,480 tCO₂e over a 10 year crediting period.

Category wise emissions in tCO₂e						
	Year	Direct Greenhouse gas emissions (Scope I)	Indirect Greenhouse gas emissions (Scope II)	Emissions due to Business Travel (Scope III)	Total	
Tata Power	FY 13-14	34,296,380	5,346	2,231	34,303,957	
	FY 14-15	35,267,826	3,263	2,474	35,273,563	
	FY 15-16	36,334,745	3,357	3,391	36,341,494	
SED*	FY 13-14	110	1,720	118	1,948	
	FY 14-15	149	1,996	311	2,456	
	FY 15-16	203	1,841	-	2,044	

*SED is not a part of CDP due to operational control

Renewable Energy

Tata Power has historically been a leader in foraying into Non-Carbon Emitting Sources (NCES) with its hydro power station being commissioned in 1915. This is more so evident now with the strategic intent of the company, which endeavours to generate 30-40% share of generation capacity to be non-fossil (including hydro) by 2025.

Emission Reduction Market Mechanism

CDM is an instrument established under the Kyoto Protocol to achieve both sustainable development and contribute to the cost-effective mitigation of climate change. It allows countries with emission reduction commitments to meet part of their reduction abroad, where greenhouse gas (GHG) abatement costs can be lower. The company has Clean Development Mechanism (CDM) projects registered with

Efficiency in Energy Consumption

At Tata Power, energy efficiency is a way of managing and limiting the increase in energy consumption. As a utility company, the operations are more energy efficient if it generates more units for the same energy input, or maintains the units generated for less energy input. The energy consumption arises from the consumption of fuel for power generation (direct consumption).

All the power generation plants do not consume any energy directly apart from the auxiliary consumption given below. This is monitored as difference between total generation and net export to grid. The auxiliary energy consumption details are given below.

Auxiliary Energy Consumption (GJ)								
Station		Million Units	Million Units		Gigajoules (GJ)			
	FY 13-14	FY 14-15	FY 15-16	FY 13-14	FY 14-15	FY 15-16		
Trombay	387	334.29	382.54	1,393,200	1,203,446	1,377,144		
Jojobera	369	375.56	366.97	1,328,400	1,352,023	1,321,092		
Hydro	37	36.62	31.52	133,200	131,825	113,483		
Mundra	1,956	2,075.49	2,000.84	7,041,600	7,471,764	7,203,024		
Maithon	365	371.95	391.61	1,314,000	1,339,005	1,409,780		
Haldia	72	67.67	61.4	259,200	243,610	221,040		
PH #6	61	60.74	62.76	219,600	218,671	225,957		

Energy consumption outside the organisation has been monitored only in terms of business travel of employees, which has been captured and reported as Scope III emissions. This is calculated based on the distance based method⁶ as vehicles are provided by third party operator/s and fuel consumption is not shared with Tata Power.

The energy intensities of the plants are based on the total fuel consumption (primary, secondary and start up included).

Energy intensity (GJ/kWh)							
Station	FY 13-14	FY 14-15	FY 15-16				
Trombay	0.0099	0.0101	0.0100				
Jojobera	0.0109	0.0108	0.0108				
Mundra	0.0090	0.0080	0.0087				
Maithon	0.0110	0.0099	0.0098				
PH#6	2.62	2.58	2.54				

Haldia operations are based on waste heat recovery

All the plants regularly undertake energy audits and propose energy efficiency measures. Based on the savings estimated and investment required, the company implements select projects. Jojobera and Trombay plants are also covered in the BEE's PAT Cycle 2. Tata Power have completed respective plant's baseline energy consumption (for 2014-15) and are given targets for specific energy consumption (in metric tonne of oil equivalent) to be achieved by 2018-19 (over five years). These plants are in the

process of taking up various energy efficiency measures to achieve these PAT targets.

Water Management

Tata Power is committed to preserving the long-term viability of the water resources upon which its operation relies and is addressing site-specific water-related issues at each of the operating stations. Water is essential for Tata Power's production of electricity, water drives hydro-electric facilities and cools fossil fuel fired stations. Being a material issue for Tata Power, the company recognises that water is a shared resource, critical to economic development, communities and wildlife in the areas where it operates.

At Hydro power plants, water diverted from river / barrages is used for power generation and given back to the river without changing or affecting its quality and this water usage doesn't account for any absolute consumption of water. All efforts are in place for regulatory compliance and no water bodies with biodiversity value are affected due to the wastewater discharge across all stations. The trade effluent, as well as domestic wastewater at all the locations, is treated to meet discharge quality parameters as per the statutory norms of respective SPCBs. The treated water is reused internally for horticulture/plantation/greenbelt development, as well as used for control of fugitive emissions from coal yards. The System is in place to submit monitoring results of water management to respective statutory agencies at regular intervals.

	Water Consumption Trends							
Station	Source & Use	FY 1	4-15	FY 15-16				
		Specific water consumption (m³/MWh)	Absolute water consumption (Mm³)	Specific water consumption (m³/MWh)	Absolute water consumption (Mm³)			
Trombay	Municipal Water consumption (Process+ Domestic Water)	0.23	1.38	0.217	1.40			
Hombay	Sea water consumption (Condenser Cooling water)	160.81	967.85	142.91	958.73			
Jojobera	Municipal Water consumption (Process+ Domestic + Make up for Condenser Cooling)	3.1	11.78	3.0	11.14			
PH # 6	Municipal Water consumption (Process+ Domestic + Make up for Condenser Cooling)	2.6	2.30	2.61	2.45			
Haldia	Municipal Water consumption (Process+ Domestic + Make up for Condenser Cooling)	3.5	3.1	3.5	2.98			
Maithon	Surface Water Withdrawal (Process + Domestic + Make up for Condenser Cooling)	2.4	16.10	2.36	16.94			
Mundra	Sea Water Withdrawal (Process & Domestic after RO treatment + Make up for Condenser Cooling)	175.67	4,668.36	172.17	44,21.35			

There is no material water consumption for hydro power plants.

⁶ Technical Guidance for Calculating Scope 3 Emissions, India GHG Program (http://indiaghgp.org/transport-emission-factors)

Waste Management

Tata Power ensures that the best waste management practices are in place to reduce, reuse and recycle the waste generated. In addition to recycling a strong focus on identifying opportunities to prevent waste or bring new life to materials that might otherwise be discarded. As a part of regulatory compliance, the waste generated is disposed through authorised vendors. Hazardous waste is stored and disposed as per Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016. Tata Power does not import or export any wastes in/from power generation and there has been no hazardous waste imported or exported as per the Basel Convention. The reporting year did not witness any spills across locations. Being a power generating company with coal being its major fuel, a large quantity of fly ash is generated, the quantity depends on the quality of coal used. Tata Power is conscious of its resource usage and thus using low ash, low sulphur coal, for its current operations, to minimise adverse impacts on the environment and the public. There are efforts in place that ensures the ash generated from thermal power plants would be gainfully utilised in creating value. Gainful ash utilisations is achieved through Backfilling in abandoned mines, Cement & brick industry, and road construction. The quantity of fly ash and hazardous wastes disposed during the period is given below. The disposal of fly ash and hazardous wastes are ongoing process and waste generated is disposed.

Ash								
Station	Disposal (kg/MWh)							
	FY 12-13 FY 13-14 FY 14-15 FY 15-16							
Trombay	8.7	9.06	7.36	8.29				
Jojobera	296	314	312	284				
Mundra	24	22.15	19	20.09				
Maithon	271.5	304	246	229.09				

Hazardous Waste								
Station	Disposal (Tonnes / Annum)							
	FY 13-14 FY 14-15 FY 15-16							
Trombay	51.67	53.7	55.97*					
Jojobera	15	45.78	15.12					
Mundra	109.6	35.03	53.56					
Maithon	12	14.7	17.2					
PH # 6	0	0	6.72					
Hydros	0	0	28.31					

*Includes 48.5 MT Used oil and 7.470 MT of Spent Ion exchange resin

At Tata Power, non-hazardous waste minimisation and reuse is one of the initiatives under GMI, as mentioned above. However, waste material such as scrap steel, wood which form a part of various auxiliary materials used in installation, construction, maintenance activity etc. are reused internally for fencing, tree guard, etc. However, the quantities were not measured. Used and waste oil

generated during operation are disposed off through authorised recyclers

Bio-medical Waste

The waste generated from medical facilities is of higher significance and improper management of this waste causes a direct health impact on the community. Tata Power understands the significance of bio-medical waste management in line with the Bio-medical Waste (Management and Handling) Rules, 1998 and its subsequent amendments thereafter. Bio-medical Waste is disposed off through authorised vendors across locations and the quantum disposed in kgs is given below.

Location	FY 13-14	FY 14-15	FY 15-16
Corporate Office, Carnac,	270	215	285
Mumbai			
Trombay	27	11	11.5
Hydros	38	39	37.58
Jojobera	3	2	1.7
Maithon	5	6.5	5.43
Mundra	234	170	143.77
Total (kg)	577	443	485

e-waste

Tata Power's Information Technology department manages a company-wide asset recovery programme to reuse and recycle obsolete electronic assets. Through authorised vendors, Tata Power ensures that all of its electronic waste is de-manufactured for reuse or reclamation in a responsible manner. Tata Power has disposed 11.62 tonnes e-waste to authorized recyclers in FY 16.

Station	Quantity of e-waste disposed through authorized recyclers (Tonnes)
Trombay	9.64
Hydros	1
Haldia	0.88
Mundra	0.1

Biodiversity

Conservation of biodiversity is not new to Tata Power. Indeed, the company's flagship biodiversity conservation program, the Mahseer Conservation Project was initiated more than four decades ago, at a time when biodiversity conservation by businesses was yet to be as mainstream as it is today.

The Mahseer Program operates on three thematic areascaptive breeding, ecology and awareness. The company has successfully bred the species in captivity and works closely with Government agencies and fisheries institutes for responsible re-introductions of the species in the wild. The breeding facility at Walvhan, Lonavla, maintained by the company is open to scientists and students for research and training purposes, thus helping build capacities in this specialized field. In 2015, a conference on Mahseer Conservation was held at Lonavla wherein over 30 scientists from various states in India participated. Company volunteers are also part of the Mahseer Conservation effort. An awareness campaign, Act for Mahseer was launched for the company's internal as well as external stakeholders. The campaign included various components such as Pledging to save the Mahseer, a Mahseer manual, and the creation of a mascot, Tor and such other activities for participants.

The catchment area of Hydros in Lonavala region consists of semi-evergreen forests that are contiguous with Reserve Forests. It is surrounded by a rich biodiversity and is home to a diverse assemblage of plants and animals. The Hydros personnel work closely with the State Forest Department to protect and conserve the forests around reservoirs. The company is also closely involved with conserving other rare species in the Western Ghats as well, such as an important indigenous tree of the Indian subcontinent, Saraca asoka, listed vulnerable in the IUCN Red List. Experiments on propagating wild orchids of the northern Western Ghats, using tissue culture techniques is also in progress. The company has also helped in the recording amphibian and reptile species found in the northern Western Ghats.

Besides the deccan mahseer (Tor khudree), which is an endangered fish species, the Lesser Flamingo (Phoeniconaias minor) is listed near threatened, in the Red List and is found in the vicinity of Trombay and Mundra power plants. Part of the Thane creek in Mumbai, adjoining the Trombay power plant is proposed to be designated as a wildlife sanctuary. It is in close proximity to the Trombay power plant. None of the company's operations have any significant impact on biodiversity in protected areas or areas of high biodiversity value outside protected areas. An immense number of lesser and greater flamingos (Phoeniconaias minor and Phoenicopterus roseus) visit the mahul mudflats adjoining the Trombay power plant. There has not been any significant negative impact on the birds and the population seems to be thriving in the vicinity of the plant. No IUCN Red-Listed species and national conservation list species is affected by operations. Two of the thermal power plants are situated along the coast. The temperature of thermal water discharge from power plants is kept well within the regulatory limits.

Mundra conducts intense biodiversity conservation work in the Kutch region of Gujarat. Through partnerships with a reputed NGO and the Gujarat Biodiversity Board (GBB), the company empowers local communities through provisions made in the Biological Diversity Act, 2002. It has helped form about 20 Biodiversity Management Committees (BMCs) in Kutch. They have created People's Biodiversity Registers (PBRs) and are working on conservation of rare

plant and animal species in and around their villages. Among these are the white naped tit (Parus nuchalis), white rumped vulture (*Gyps bengalensis*), Spiny-tailed Lizard (*Saara hardwickii*), Marsh Crocodile (*Crocodylus palustris*), a rare and endemic plant species, *Olax nana*, and many others. As a part of these programs, habitats of these species will be conserved. The company has not carried out any biodiversity offset projects in the reporting year.

Expertise on Biodiversity is now an integral part of the SAC of Tata Power with the addition of a senior representative of a prime international conservation organization in the Council.

Although biodiversity conservation efforts in the company are an on-going phenomenon, a formal strategy for conservation has been formulated in the reporting year to align biodiversity management efforts with the company operations and aspirations. The document outlines goals and objectives, identifies areas for further work in this field and has set targets for achieving these.

One of the core aspects identified in the Biodiversity Strategy is that of awareness generation across all stakeholders of the importance of biodiversity and its relation to business. This is achieved by various programs and sessions. To further the cause of raising awareness, Tata Power is a member of the International Union for Conservation of Nature, Leaders for Nature (IUCN LfN) Programme. The IUCN LfN Programme works with member businesses to enhance biodiversity awareness in the company as they bring with them expertise from around the world on this subject.

Capacity is also built through in-house classroom sessions, campaigns and mass e-mailers. A Monthly Biodiversity Photography Contest is organized for all employees of the organization which follows a citizen science model and helps capture the flora and fauna around the company's operations. This has helped the organization build a record of the flora and fauna around the sites. Winning entries are shared across the company accompanied with pertinent ecological information.

In 2016, Tata Power signed Memorandum of Understanding (MoU) with IUCN for Biodiversity Management with a special focus on its Mundra plant site. It is two-years partnership at the end of which the company will be provided with recommendations to better manage its site in terms of biodiversity.

In the reporting year, Tata Power signed up as a pilot tester for the Natural Capital Protocol created by the Natural Capital Coalition. Thus, a natural capital valuation project for one of the sites is under preparation.



Tata Power strongly believes in Zero harm to the employees, allied workforce and the communities within which the Company operates. In order to achieve this, world-class safety standards and procedures have been implemented for establishing safety culture and inculcating safe behaviour among the employees.

At Tata Power, safety is a core value and in pursuit of this belief and commitment, the company has undertaken various Digital projects. One such initiative is the 'Tata Power Suraksha', a safety mobile application launched in 2016 for its employees. Designed to foster high-level engagement and provide a user-friendly experience, the app aims at reporting and tracking any unsafe practice/scenarios. 'Tata Power Suraksha' provides an easy tool to the user for reporting unsafe scenarios. The application dashboard exhibits the four key verticals i.e. Post Issues, My Issues,

Reports, Help & Feedback. The app allows users to register any issue or incident that they come across in real-time by uploading images, describing the same in the free text box while enabling them to directly submit the issue to the concerned authorities. The most significant feature of the app is that it allows users to define the risk of the issue/incident and the GPS tracker automatically provides the geographical location in latitude and longitude details. Tata Power Suraksha app is available for free on Android handheld devices offering employees a fast and convenient way to report a safety concern. The app also allows its user to track the issues reported by them along with the status update on the same. The app generates a unique ID for every issue reported and a date search option is available for viewing the records posted in a specific period. Users can also provide their feedback through the Help & Feedback option provided in the app itself which will further help in enhancing safety in the organisation.







Log in Screen for the "Suraksha" App

Home Screen - Dashboard

At Tata Power, a healthy workforce is an important contributor to its competitiveness and Sustainability. All stations maintain conducive work environments meeting Indian/ International standards on hygiene, lighting, ventilation and effective controls on noise and dust. Stations are provided with occupational health centres with adequate medical staff to monitor occupational health and provide immediate relief when required. Adequate numbers of first aiders are trained in various in-house sessions; such sessions are conducted periodically by well-known specialists/medical practitioners on the occupation related health hazards.

Each power plant has a central safety committee with representation from the major departments/work areas. These departments/work areas further have divisional subcommittees and represented by workers as well. All workers are covered in formal joint management-worker health safety committees. The contract workers are also

preventative action plans are developed through SMS. Further, to handle unforeseen events or disasters, Business continuity and Disaster Management Plan (BCDMP) is in place at all generating stations. These BCDMPs are location specific and are reviewed on a regular basis.

In recent years, Tata Power has been raising greater awareness among its employees on the importance of safety in efforts to keep the operations accident-free. This is done through setting annual Safety Targets as well as on-going initiatives that seek to engage both employees and contractors on safety issues. The Safety Targets are communicated to all its employees by its highest decision-making authority. It is the responsibility of the senior management at respective locations to make sure that the safety targets at met.

The performance against safety targets of the reporting year as provided below.

Proactive Targets	Target	Achieved
Adherence to Annual Safety Plan (%)	100%	100%
PTW Audits (Nos)	100%	100%
Near miss reported	1,980	2,168
Safety Training Index	0.5	0.45
Implementation of recommendation (%)	100	100
Reactive targets	Plan	Actual
Fatality (Nos)	0	2
Lost Time Injury Frequency Rate (LTIFR)	0	0.1683*
Lost workday cases	0	6
i) Incident Investigation using RCA	100	100
ii) Implementation of CAPA (%)	100	100
Sharing of lessons learned (%)	100	100

*LTIFR combined data for employees and contractors have been maintained in SAP from FY16.

trained in safety in their induction training and also undergo specific trainings based on area of work and duration of their stay etc.

Identified medical examinations, as per statute, are conducted for various categories of employees based on age-groups as well as exposure to occupational hazards. These statutory medical examinations take place annually or as applicable. In the reporting year, no employees were found suffering from any occupation related illness/diseases.

At Tata Power, maintaining high safety standards at all its stations is of significant importance, as it is committed to protecting the health and safety of each of its employees, contractors, customers and the communities in which it operates. A Safety Management System (SMS) is in place to ensure that both employees and contractors adhere to good safety practices and procedures at all times. The risks are assessed; incidents tracked and corrective and

At Tata Power, Safety culture is guided by the 10 commandments of Safety and it is the responsibility of all its employees to adhere to them. Further, the commitment is shown through the Safety vision, pledge and policy.

Tata Power relies on a sizeable number of contractors/vendors (on term contracts) to perform regular tasks at the generating stations, under the supervision of employees throughout the year. To ensure that Tata Power continues to uphold its good safety performance, contractors' safety is taken seriously. Contractors are not only required to take part in the regular safety briefings at daily toolbox meetings, they also participate in safety initiatives and emergency drills organised. Various Health and Safety topics are covered in the formal agreements with Trade Unions. The entire Contractor Safety Management has been revised and a new code is now in place w.e.f. Dec 2015.

Tata Power also has a Consequence Management Policy which sets out the general approach to managing the

safety deviations and establishes processes for corrective counselling. It discusses the disciplinary actions in response to safety misconducts or violations as described in the Industrial Employment Standing Orders Act 1946 or such other Acts/Rules applicable to the Company. This Policy also ensures that while laying down an approach, it does not overlook the intent behind any safety deviation or malpractice. The objective of the policy is to ensure that each employee is committed to Safety and at the same time, gives them independence to take appropriate decision as per the necessary process and operation.

Safety Statistics

Total 2 Fatalities were reported in FY-16. Both these fatalities happened at Mundra and both of these were contract workmen. One fatality happened during lift maintenance and the other due to electrocution. The claims were settled with insurance and other compensation payouts as per the agreement with unions.

Report) is also shared with select senior leaders which gives details of the incidents across the organisation occurring during the day. All incidents are investigated using standard root cause analysis checklists to establish the root causes. For high potential/ high severity incidents and near misses, a cross-functional team is formed to thoroughly investigate causes and identify suitable corrective and preventive actions to avoid recurrence. Implementation of the recommendations is verified for close out through online system and the Divisional Head (where the incident has occurred) is responsible for ensuring timely close out.

As a standard practice, a 'Lesson Learnt' presentation is shared as a 'Safety Pause' during the MD's monthly BSC review meeting attended by all senior leaders. These incidents are also shared company-wide through monthly 'Safety & Security' newsletter.

Safety Reward and Recognition

Tata Power has a reward and recognition policy. A person

Injury Statistics	Permanent employees	Contractor and subcon- tractor workforce	Permanent employees	Contractor and subcon- tractor workforce	Permanent employees	Contractor and subcon- tractor workforce
Tata Power	FY 13-14		FY 14-15		FY 15-16	
Total Days Worked	1097,233	3,988,414	1,200,598	4,064,448	4689	9873
Total Hours Worked	8,777,865	31,907,319	9604789	32,515,586	7376203	30,142,782
Lost Days (Man-days Lost)	12,067	18,235	130	12,240	246	12,022
Fatalities	2	3	0	2	0	2
Total recordable injuries	34	-	39	-	42	-

The data pertains to the entire workforce and is not segregated as per gender. However, there were 0 injuries to female employees

Tata Power has a structured way for reporting, investigating, and monitoring incidents. Tata Power has a written procedure to report and investigate incidents. All incidents are now reported through SAP-EHSM. A Safety alert is immediately generated (through the system) for high severity incidents (LTI etc.) and brought to the immediate notice of senior leadership team for issuing necessary instructions/further line of action. A system generated report of all other incidents (Daily Incident

who reports maximum number of near misses, unsafe conditions, work stoppage cases and special category actions will be awarded as a Divisional Safety Champion for that month. There is also an ED's award, once a quarter and CEO's award every 6 months on safety. There are fixed criteria for selection. In addition, the Best Division is also awarded every quarter. The list of award received by Tata Power on Safety in FY16 are enumerated below:

S. No.	Name of Award	Awarding Agency
1	Best practices award to Trombay	National Safety Council and Directorate
		of Industrial Safety and Health GoM
2	Prashansha Patra to Maithon	National Safety Council of India
3	Certificate of Appreciation to Haldia	National Safety Council of India
4	Certificate of Appreciation to PH#6	National Safety Council of India
5	Memento to Tata Power for active participation in Electrical safety week	Govt of Maharashtra
6	Certificate of Excellence for Visitor safety Induction Module developed by	The Mega Corporate Film Awards 2016
	Tata Power and Tata Interactive Systems	
7	Certificate of Appreciation to Tata Power for active participation in	GoM
	Industrial Safety Rally organized by DISH	

Safety Training Initiatives

To improve the quality of safety trainings, third party agencies and TPSDI is providing training and certifying the employees.

- 5 N's Train the Trainer programme on Critical Safety Procedures conducted and 509 O&M engineers were trained in FY'16. Total 15 O&M Engineers were trained in practical training on Work at Height from external vendor
- 500 O&M Engineers are undergoing web-based Elearning for 10 High Hazard Safety Modules. Monthly report of training progress is being shared with divisions
- 200 Office employees are undergoing 5 office safety web-based E-learning modules.

Safety Trainings							
FY 13-14 FY 14-15 FY 15-16							
Safety Training mandays	256,342	34,329	26,564				
Training Index	0.53	0.59	0.45				

Safety Training is reduced in reporting year as from FY16, procedure of training is changed.

Safety Key Initiatives

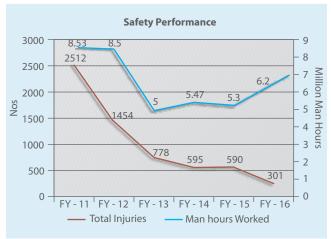
- Visitor Safety Induction Module: This initiative was started to give safety instructions to visitors before acquiring a gate pass to enter the plant.
- Employee Safety Induction Module: To induct GETs, DETs and Lateral joinees to be aware of safety systems available at Tata Power. Each new joinee has to undergo this training module before they join duty.

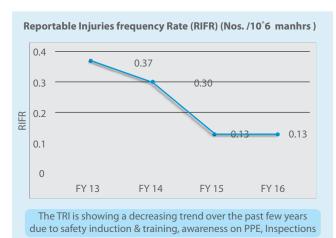
- Safety Intervention on Wheels: Training setup made on a vehicle and moved around the site, during tea break at evening time, this is utilised to share Safety videos along with unsafe situation observed during site round.
- Disaster Management and Business Continuity Plan: Disaster Management Plan and Business Continuity Plan has developed in line with NDMA guidelines for Tata Power across divisions as per ISO: 22301.

Contractor Safety Management

As a part of new initiatives, company has focussed this year on Contractor Safety Management and Workforce Skill development. Dupont six step contractor's safety Management process followed by Tata Power over last decade has been simplified during the current year specifically to suit Tata Power and named as Contractors Safety Code of Conduct (CSCC). This is a three step process which comprehensively takes care of the various aspects of safety at the time of Registration, bid evaluation and Post Contract Award stages. The Service contractors are classified into various categories (high, medium and low risk) based on their past safety performance and ability to handle a magnitude of safety risk. To enable a supplier to qualify to undertake high and medium risk jobs they would need to fulfil stringent criteria. In order to understand the level of compliance of Tata Power's major and critical suppliers, the suppliers were screened on various criteria including Environment Management, Health & Safety, Human Rights and Ethics. No violation has been found on these counts. Tata Power has already incorporated vendor evaluation/screening based on a skilled workforce, safety qualification and other parameters like commercial and statutory obligations as a part of vendor registration on the ERP platform.

Safety Performance Trends



















The power sector landscape across different focus geographies such as ASEAN countries, Middle East, Georgia, Turkey and sub-Saharan Africa region has been evolving rapidly. The global coal prices have remained under pressure throughout last year, like for all other commodities. This has impacted the attractiveness of the coal mining business in Indonesia. Regulatory reforms in the power sector are critical given the current challenges across the value chain. In the reporting period, there have been many new regulations, notifications such as Electricity (Amendment) Bill, 2014; Revised Standard Bidding Documents; Draft Renewable Energy Act 2015; UDAY Scheme; Revised norms of Emission Standards for Coal based thermal power plants and many state level regulations etc. Tata Power has analysed impact of these and is prepared to meet the new requirements.

Financial Highlights: FY16 vs FY15

- Dividend recommended is Rs. 1.30 per share
- Consolidated PAT at Rs 873 crore as compared to Rs. 168 crore
- Standalone PAT at Rs. 772 crore as compared to Rs. 1,010 crore

Key Business and Growth Highlights

- Successfully commissioned its 2nd solar farm (29 MW) in Palaswadi, Maharashtra
- Commissioned India's first Natural Ester filled distribution transformer in Mumbai
- Tata Power's 100% subsidiary refinanced existing USD 450 million Fixed to Floating rate subordinated notes by medium term loan

- Signed Share Purchase Agreement (SPA) with Ideal Energy Projects Limited (IEPL) for acquisition of 540 MW coal based thermal power project
- Fully commissioned 2 units (63 MW each) of its 126 MW Dagachhu Hydro Power Corporation (DHPC) in Bhutan
- Completed financial closure for its 185 MW Adjaristsqali hydro project in Georgia in association with Clean Energy Invest AS Norway (Clean Energy) and IFC InfraVentures (IFC). The project is being financed by IFC, ABD and EBRD
- Entered into a SPA with Tata Africa Holdings (SA) (Pty)
 Ltd. for formalising the acquisition of their 50%
 shareholding in Itezhi Tezhi Power Corporation Ltd
 (ITPC) Signed MoU with Russian Direct Investment Fund
 to increase Energy Investment between India and
 Russia
- Crossed the landmark milestone of crossing 500 MW through wind energy
- Tata Power Solar won 100 MW NTPC solar project.

Management Commitment and Benefits

For employees, unfunded/funded defined benefit schemes are operated by Tata Power. These schemes are ExGratia Death Benefits, Retirement Gifts, Post Retirement Medical Benefits, Health Care Insurance and Pension along with a funded defined benefit plan-Gratuity, which is administered by the Trustees Tata Power Gratuity Fund. The distinct contribution plans of Tata Power such as Provident Fund (PF) and Superannuation is in place for eligible



















Financial Snapshot

Economic Performance (in INR Crore)	FY 13-14	FY 14-15	FY 15-16
Economic Value generated	9,283	9,702	8,993
Economic Value distributed	8,606	8,358	7,771
Operating costs	6,375	6,067	5,476
Employee Wages & Benefits	545	687	656
Payments of providers of capital	1,320	1,218	1,327
Payments to government	355	358	283
Community Investments	12	28	29

Tata Power includes Trombay, Hydro, Jojobera, Haldia, Wind, services & SED. Tata Power did not receive any financial assistance from the government in FY 15-16.

employees. Under these schemes, the Company is required to contribute a specific percentage of salary to retirement benefit schemes to fund the benefit, as stipulated by Government of India. As on March 31, 2016, the Defined Benefit Obligation for the current reporting year is 2845.4 million for Tata Power. All the employees including contract /short term ones are paid more than the local minimum wage.

Indirect Economic Impacts

As part of its Affirmative Action (AA) program, Tata Power has implemented several initiatives for communities near its operations. The major programs carried out in the neighbourhood of the operating plants and projects include skill development programs for youth (Industrial Training Institutes, Business Process Outsourcing (BPO) training and vocational trainings), entrepreneurial programs like fly ash brick making/supporting Self Help Groups (SHGs) and support for educational initiatives for school children like scholarships and coaching classes in the evenings along with assistance in the development of adequate infrastructure.

The activities in Jawhar taluka (in Palghar, Maharashtra) included new initiatives like livelihood generation - kitchen garden and poultry farming and setting up of the Village Development Committee (VDC). The VDC has elected members from the village as well as Tata Power and are responsible for the sustainable development of the village.

Some major AA program details are:

 Promoted 240 community entrepreneurship ventures like fly ash brick making, poultry farming, garment manufacturing, etc. with an investment of Rs. 139 lakh, which helped to increase family incomes upto Rs. 60,000 to Rs. 80,000 per year.

- Outsourced Rs. 17.65 crore of products and services from 36 vendors / contractors.
- Provided technical and monetary support for various agricultural interventions to enhance the income of about 730 SC/ST farmers.
- Supported 731 SC/ST persons across various Industrial Training Institutes (ITIs), skill development programs.
- Built a full-fledged hostel for outstation SC/ST youth at ITIs at Mulshi.
- Enabled access to computer education and spoken education to 2,422 SC/ST students across locations.
- Provided scholarships to 53 SC/ST students amounting to Rs. 13.17 lakh.
- Extra/night coaching classes benefited about 318 SC/ST students appearing class X and XII board examination.
- Facilitated access to basic essential amenities like safe drinking water, healthcare, solar lights etc. to over 41,000 SC/ST population across locations.

Responsible Supply Chain Management

Tata Power sources ultra-low Sulphur, low ash coal from Indonesia, which results in lower emissions and ash generation from the operations. This coal is branded as

B	2014-15			2015-16				
Procurement (INR millions)	Local	Import	Total	% of Local Procurement	Local	Import	Total	% of Local Procurement
Non-Fuel Procurement	28,053	588	28,642	97.9%	38,779	209	38,987	99.47%
Fuel Procurement	34,463	39,774	74,238	46.4%	33,093	51,100	84,194	39.31%

exclusive of taxes & duties

enviro-coal considering its lower environmental impacts as compared to other coal. This coal is sourced from globally reputed mines in Indonesia which primarily opt for fully-mechanised operations following international safety standards; thereby eliminating the possibilities of Child labour. The coal which is sourced from India primarily comes from mines owned by Coal India Limited which is a government agency. The human resource employment guidelines of these agencies are in line with the compliance requirements.

Tata Power has already incorporated vendor evaluation/ screening based on a skilled workforce, safety qualification and other parameters like commercial and statutory obligations as a part of vendor registration on the ERP platform. Going forward, the company intends to gradually widen its screening base on a continual basis. The sustainability criteria are intended to be incorporated at the vendor online registration stage to ensure that the supplier adheres to all the criteria in the Sustainability chain.

A significant spend of Tata Power is confined to the local sourcing; i.e. Suppliers and service providers having facilities and/or manufacturing bases within the Indian geography.

Supply Value - Tata Power	FY 14-15 (INR Million)	FY 15-16 (INR Million)
Monetary value of Significant (Top 10) Suppliers	72,980	122,378.7
Monetary value of Local Suppliers (Top 10) out of significant suppliers	41,382	68,681.54



Care for Customers



Tata Power's generating stations sell power to the state owned distribution utilities and to the users directly through bilateral agreements and through electricity exchanges. Tata Power also distributes electricity in the city of Mumbai. In the reporting period, the Distribution License of Tata Power was granted for the entire city of Mumbai, including suburban and South Mumbai for the next 25 years. Tata Power is not into the sale of banned or disputed products. Tata Power fairly and effectively engages with its institutional and business customers viz., the state owned distribution utilities and the electricity buyers through bilateral agreements and electricity exchanges.

Management Approach

Tata Power serves around 6.64 lakh consumers. Tata Power endeavours to make all its consumers happy, at all touch points, through its supply and service. Tata Power also contributes to providing an uninterrupted power supply to some of the major lifelines of the Mumbai city like airport, refineries and major hospitals with cutting edge technology. Tata Power supplies the cheapest power to consumers in the 0-300 residential category (cheaper by about 25%-30% over the competitive distribution licensees). Tata Power is growing at a rapid pace through its increased focus on Consumer Acquisition Camps for lowend consumers and offering all the possible aids for consumer's benefit.

In the distribution business, in Mumbai, Tata Power has taken a number of initiatives viz., Sankalp to improve the quality and reliability of its power supply and enhance customer service. Sankalp Initiative focuses on improving operational efficiency, cost efficiency, delivery efficiency and building capabilities for continuous performance improvement. The Company has implemented

Distribution Management System in its Mumbai network to facilitate effective monitoring and control of its network operations in real time. With this innovative technology, Tata Power would be able to restore supply to its customers in the shortest possible time without any manual intervention. Also, Tata Power implemented the innovative technology with the use of Natural Ester filled transformers in line with the company's preference for green technology. The natural ester fluid is made from a carbon neutral renewable resource and with its high fire point reduces the risk of fires in the electrical installations.

R&D strategy integrates sustainability with research, technology, innovation in generating and distributing power. Tata Power distribution projects have received IMS certification and this demonstrates systematic efforts to keep the customer, safety, environment and quality at the centre, in the distribution activities. The company has introduced multilingual customer care web portal, pictorial depiction of signage/safety warnings and 24x7 call centre facility. The Company believes that adequate & effective communication is important to avoid any kind of misrepresentation, incorrect statements or misleading impressions. Fully integrated systems are in place to conform to all the statutory laws and standards related to marketing communication, advertising, promotion and sponsorship. There have been no incidents pertaining to violation of any regulation or voluntary codes pertaining to marketing communication.

Tata Power would continue to balance stakeholder's interests within the distribution area by welcoming residential customers along with commercial and industrial consumers while keeping good relations with the other operators in the area. Tata Power strongly believes that the vision of MERC and Governments to get

consumers a competitive cost option with reliable supply, must rather be augmented and Tata Power would continue to facilitate the same with positive and close association with all stakeholders. Tata Power continues to aggressively expand its network in Mumbai to connect more and more consumers on its wires so that they can avail of tariff benefits. The Company remains committed towards strict compliance of MERC's Electricity Supply Code and 'lighting up lives' for the years to come.

With an annual sale of 5,774 MUs, the retail customer base has increased to 6,64,407 with an addition of 18,511 consumers from the previous year. The licensed area for distribution is 485km2 and the entire licensed area is served through Tata Power's distribution network without any unserved area.

Tata Power has been regularly conducting Consumer Acquisition Camps for low-end consumers and offering all the possible aids for consumer's benefit such as:

- Awareness sessions through addressing mass gatherings of area/society residents.
- Guidance meetings with Society's Office Bearers/ Representatives/Influencers/Consumers for procedures and advantages of shifting to Tata Power.
- Banners and Posters in the catchment areas along with the application collection drive.
- Sensitisation and meeting with Influencers, e.g. NGO's/Leaders/Society Members before rolling out Application collection camps.
- Advertisement in local Hindi, Marathi and Gujarati newspapers informing consumers about competitive tarifffor low-end consumers.
- The announcements of schedule of camps in leading local newspapers.
- Flyer insertions in widely circulated newspapers.
- Fleet on Street team visiting consumers with respect to providing guidance, collecting applications.

Highlights

Tata Power has grown its distribution network infrastructure manifold and its focus has been to develop a

Length and Efficiency of Distribution	FY13-14	FY14-15	FY15-16
Length overhead (km)	95.29	95.29	104.4
Length underground (km)	HT - 1805.6	HT - 2,093	HT - 2200
Aggregated Technical &	LT - 958	LT - 1,510	LT - 1700
Commercial loss	1.1	0.96	0.64
(% of energy loss)			

Circuit Kilometres = No. of route length multiplied with No. of circuits

Length and Efficiency of Transmission	FY13-14	FY14-15	FY15-16
Length overhead (CKT km)	995.078	1026	1044.67
(220 kV and 110 kV)			
Length underground (CKT	129.634	148	154
km) (220 kV and 110 kV)			
Transmission loss (%)	-	1.54	1.97

robust network backbone which includes distribution Substations (DSS) and the HT network to be able to cater to the growing market demand in addition to the development of last mile connectivity to reach consumer premises. The infrastructure developed in FY16 includes:

Distribution Sub-stations (DSS) - 33 kV/22 kV/11 kV	=	30 no.
High Tension network (HT)	=	2,200 km approx
Consumer Sub Stations (CSS) - 11 kV/ 440 V	=	828 no.
Low Tension network (LT)	=	1,700 km approx

Tata Power is creating a backbone (33kV/11kV) of distribution' network, identifying sources or outlets at Receiving Substations (RSS) to feed supply to DSS, establishing connectivity to feed the DSS from identified RSS and creating 11kV main ring network. The network addition has been achieved against all odds, the most crucial being loss of time for cable laying due to permission related delays. Tata Power is also complying with network rollout philosophy as per the MERC Supply Code Regulations, SOP Regulations and CEA (Technical Standards for Construction of Electrical Plant and Electrical Lines) Regulations, 2010. Tata Power plans to set up additional 30 DSS out of which 17 are planned to be commissioned in the next 5 years and the remaining 13 DSS post-FY 2018-19. The Company is also planning to increase MVA Capacity from 1525 MVA to 2445 MVA by FY 2018-19. The developed capacity of Tata Power is expected to meet 50% of the future Mumbai load assuming a growth rate of 3% per annum.

Distribution and Transmission Network

The transmission and distribution business of Tata Power ensures energy reliability and availability in the areas of presence. The length of Distribution and Transmission lines has been provided below.

Customer Statistics

Tata Power has three categories of customer base as below:

Category	FY13-14	FY14-15	FY15-16
Residential	4,45,942	5,74,824	6,21,613
Industrial	6,482	5,569	5,248
Commercial	41,287	38,018	37,546

Customer Engagement

Tata Power is conscious of the fact that its products and services touch many lives and livelihoods in more ways than one. The Company constantly strives to develop trusted relationships with consumers by winning them over through anticipating their behaviour and preferences and engaging with them on a regular basis.



Tata Power has a firm belief in "Leadership with Care" which is demonstrated by its efforts to address hindrances like language, culture, low literacy and disability related barriers in safely using electricity and accessing customer support services. Tata Power has a multilingual portal in three languages (viz. English, Hindi and Marathi) and a call venter for 24X7 customer support. Additionally, most of the officers at Customer Relations Centres (CRC) are fluent in the local languages. At CRCs, preferential service is accorded to physically challenged customers, wherein their queries/concerns are resolved on priority basis. Tata Power has a team of dedicated Key Account Managers who play a crucial role in customer engagement initiatives for HT consumers by apprising them of all the valuable information and initiatives beneficial to the mutual relationship and to entrust the values of organisation. A dedicated team is there to facilitate as a single window mobile service unit for LT consumers.

In alignment to the India's INDC, 'To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation', Tata Power has initiated various initiatives for engaging with its customers which are elaborated below.

Club Enerji - This initiative by Tata Power works with schools and school children along with college students, parents, teachers, partners and the society at large to help curb the wasteful usage of electricity. Based on the response and feedback received, this initiative is extended nation-wide. Club Enerji has reached 500 schools across

India, sensitized more than 11.6 million citizens and saved more than 17.25 million units till date. This saving is equivalent to saving 17,000 tons of CO2. Total 1,337 Mini Clubs are formed all over India under the Club Enerji initiative.

Demand Side Management - This initiative constitutes cooperative activities between a utility and its customers to implement options for increasing the efficiency of energy utilisation (and therefore a reduction in waste), with resulting benefits to the customer, utility, and society as a whole. Unders My Mumbai, Green Mumbai, Energy audits, demand response (reduction in load by the consumers on request by utility - first time in India), thermal storage (innovative technology - first time in India) are some of the unique interventions.

Based on market survey and scientific load research several initiatives are implemented in Demand Side Management (DSM) schemes. This includes Appliance Exchange program, Energy audits and Peak load shifting program. These initiates have lead to significant saving from the customer base. Domestic Efficient Lighting Program (DELP) has been launched for residential consumers. Being implemented by M/s. EESL, a union Govt. undertaking, the DELP Program promotes the penetration of the LED Bulbs in the residential sector. Tata Power also operationalized the Net Metering arrangement for the Rooftop Solar PV system at the premises of a consumer. It is expected to provide a major boost to the promotion of solar energy by the end consumer. Tata Power launched the 'Be Green' initiative to unify all consumers in the green movement. Through this initiative, the company intends to motivate consumers to associate with and contribute to ensuring a greener and sustainable planet.

Be Green - Tata Power launched the 'Be Green' initiative to unify all consumers in the green movement. Through this initiative, the company intends to motivate consumers to associate with and contribute to ensuring a greener and sustainable planet. The following programs are run under the aegis of Be Green,

- Energy Efficiency (DSM programs)- promoting judicious, optimum and environmentally sound utilisation of energy
- Carbon footprint mapping Calculation of the amount of CO₂ that is emitted into the atmosphere as a result of daily activities
- e-billing, electronic payments
- Energy conservation awards to consumers during Consumer meets

To drive awareness of Environment conservation and safety to its customers, Tata Power has various programs in place;

Ghar Ghar Me Jan Jagruti Abhiyan - Ghar Ghar Me Jan Jagruti Abhiyan is conducted to create safety awareness amongst public residing below the overhead lines. Employees visit different locations of Transmission Lines and create awareness amongst the public. In FY16, more than 16,600 people were sensitized in this drive that comprised 55 Street Plays, involving 566 rigorous volunteering man hours and 254 active volunteers.

Energise Newsletter - Tata Power reaches out, through its quarterly newsletter "Energise, to its key Commercial and Industrial consumers in order to keep them updated about the sector and various initiatives taken by the company in the sector. The newsletter tracks key developments, analyses major market trends, features opinions of industry experts, interviews top managers, captures technology developments, profiles people of interest and provides key data and statistics. This engagement platform has been highly appreciated by consumers as high quality, user friendly and relevant.

Residential Consumer Meets - Tata Power is committed to helping its consumers in their energy conservation initiatives and ensure a safe environment. Tata Power conducts various consumer meets across various segments to create awareness about safety and energy conservation, together with understanding their needs and process constructive feedback.

With focus on Customer centricity, Tata Power has designed some value added services to deliver excellent customer experience and these are elaborated below.

Safety Audit for Consumers - To control safety risks or hazards in high risk establishments, Safety Audits are being carried out for determining necessary actions to minimise such hazards. Professional safety consultants along with Divisional Operation & Maintenance Engineers have carried out 282 safety audits in different major places of public congregation.

Safety Inspections - Tata Power's Operations & Maintenance Engineers conduct inspections in small commercial, industrial establishments and residential societies to identify electrical hazards in consumer's premises with special attention to unsafe installations, potential electrical fire hazards, etc. Tata Power has carried out more than 1000 safety inspections till date.

Safety Awareness - Specifically for residential consumers, Tata Power Distribution Division arranged safety training programmes to make consumers aware of electrical safety, causes of electrical accidents at home and preventive measures. Two simulator kits, developed in-house, were used to for demonstrate the use of Earth Leakage Circuit Breaker (ELCB) and overloading.

Wireman Training Programme - Many times residential consumers face challenges due to shortfall in skilled wireman. Tata Power launched a hands-on training fiveday module of Wiremen Training Programme for residential Consumers. Presently, Tata Power has trained 54 wiremen successfully in the reporting year, this programme, adding up to approximately 300 trained wiremen so far.



OEM Training for Consumers - Tata Power has conducted knowledge sharing sessions on 415 VLT Breaker for the Industrial category consumers on a monthly basis with the support of ABB India, Schneider and L&T; which shared their expertise on the subject and updated them on the technological trends. Participation by 408 consumers from 148 organisations was recorded. These sessions impart knowledge to consumers in the areas of Principle of breakers; Operations and Maintenance of breakers; Replacements of parts in case of any defects; Safety aspects during handling; Latest technological trends.

"No to Paper Bills" - For the Company's commitment to 'Care for Environment', the consumers have joined hands by opting for e-bill. So far, 22,403 consumers have opted for only e-bill.

Consumer Benefits

New system SOOCHNA introduced for enhancing consumers' communication regarding planned outages and force shut down. Consumers are communicated through an SMS seven days in advance of their planned outage and also during their forced outage.

Development of SAP-based Dashboard for CRC and CC executives for deeper clarity in understanding of high registration cases resulting into the spot revert to the consumers and reduction of non-genuine complaints.

Bill Payment Options

To facilitate easy bill payment facility for consumers, the Company has numerous bill payment options available and are adding on to these options based on the technology improvements and demands from consumers. The bill payment options offered by Tata Power under various categories are as follows:

Brick and Mortar Options - CRCs/Bill Collection Centers (BCCs) - Existing 23 CRCs and 11 BCCs. Tata Power has also tied up with Post Offices across Mumbai; provision of cash payment through Suvidha/ITZ-Cash Cards; and tie-up with more than 200 bank branches and six for cash and cheque payments.

On-the-Go Options - These options include installation of more than 25 kiosks with a provision of accepting cheque payment and providing instant receipts; more than 800 drop boxes - at public places where consumers can opt to deposit bill payments by cheques; and Mobile Bill Payment Collection Van which covers remote locations weekly catering to about ~2700 consumers per month.

Electronic Payment Options - These include Immediate Payment Service (IMPS) which allows the consumers to make payment of electricity bills directly through their mobile phones; Online payment through debit card, credit card and net banking; Electronic Clearing Service (ECS) enabling consumer to make monthly Tata Power bill payment directly through bank account; and through Electronic Bill Payment with standing instruction on their debit card or credit card to make a monthly payment to Tata Power.

Consumer Relation Centres (CRCs)

CRCs provide its consumers with easy access to a number of services and the opportunity to directly interact with Tata Power representative, all under one roof. Various services provided at CRCs include providing and accepting application forms; handling Consumer queries, request and complaints; and bill payments in cash and cheque.

Some of the initiatives taken in Customer Relations Centre:

Queue Management System - Tata Power has implemented Queue Management System in CRCs, which is a complete branch analytics system that not only manages Consumer queues in real-time inside CRCs, but also provides the management real-time access to performance metrics like Consumer Wait Time, Average ServiceTime and Employee Efficiency.

Feedback Tabs - Tata Power has replaced the paper-based Feedback forms with TABS for Automated Feedback Mechanism at the CRCs. This system enables us to tap consumer's feedback in less than 10 seconds.

Consumer Payment behaviour analysis - Through SAP system, Tata Power analyses its consumers on the basis of their payment behaviour trends and segregates them in different group thereby helping Tata Power to arrive at a specific group of consumers who are not availing the prompt payment discount. Thereafter, Tata Power encourages them by means of reminder SMS, Tele-calling and other personal communications to avail the prompt payment discount.

Marketing Communications

The Tariff and Regulatory orders are the major according to the standards/laws of marketing for the power sector. These are communicated via print media and consumer collaterals. To remove all the impediments in the communication, the company has introduced multilingual customer care web portal, pictorial depiction of signage/safety warnings and 24x7 call centre facility. The Company believes that effective communication is vital to avoid any kind of misrepresentation, incorrect statements or misleading impressions. Fully integrated systems are in place to conform to all the statutory laws and standards related to marketing communication, advertising, promotion and sponsorship. There have been no incidents pertaining to violation of any regulation or voluntary codes pertaining to marketing communication.

Social Networking - Tata Power embraced social media marketing not just promote the products, but also receive customer feedback on the same. Facebook and Twitter are the online communication channels used by Tata Power for social networking. In addition to the above, Customer Talk - monthly magazine is circulated internally that elaborates on the progress made by the Distribution segment of Tata Power.

Innovations

Tata Power initiates various innovations to ensure improvement in the processes and operations, thus continuously striving to enhance customer service and enrich consumer experience. In line with its commitment to constantly innovate for the benefit of its customers. The company has always been a pioneer in ushering innovative interventions and adoption of new technologies for enhancing the services to its customers. With the implementation of DMS, Tata Power would be able to restore supply to its consumers (in the unlikely event of a power failure) in the shortest possible time without any manual intervention. The system instantaneously determines fault location with a real-time geographical view and actual scenario of the affected area. This is a result of the various advanced functionalities of DMS like Auto-Fault Identification, Localization, Isolation and Service Restoration (FLISR), Switch Order Management, Feeder Reconfiguration, State Estimation & Dynamic Load Flow, etc. The DMS is currently rolled out for 2 zones. The balance 4 zones will be covered in a phased manner by March 2016.

It has been the endeavor of the company to constantly innovate to enhance safety, overcome the challenges of the paucity of space and care for the environment. In line with his philosophy, Tata Power has partnered with Toshiba and Cargill to design and develop India's first Green, Safe and Compact Natural Ester based Pad Mount Substation. A Pad mount substation is an integrated unit which houses the HT elements, transformer and LT elements in a tank filled with Cargill's Envirotemp™ FR3™ natural ester fluid. This design has helped reduce the land footprint requirement by almost 70% as compared to conventional substations. This fully enclosed safe, fireproof, green and compact design is ideal for installation in public places like parks, malls etc. The safe and green design of transformers is attributed to the use of Natural Ester, which have a Fire point of more than 360°C (as against 160°C for Mineral Oil) and hence are highly safe. These substations are the safest solution to gradually replace the conventional plinth mounted and Pole Mounted Sub-station filled with mineral oil, installed in public spaces which have a fair degree of vulnerability to fire, thus endangering public safety.

Tata Power signed a MoU with the Ministry for Development of Russian Far East, Government of the Russian Federation, to explore and develop investment opportunities in the energy sector. Tata Power (SED) and Cranfield University have signed MOU for possibility of entering into a strategic partnership through research and development (R&D) and academic study in the areas of defence related engineering and emerging technologies Systems Engineering including Large System of Systems and MoDAF for Software Systems, Guns, Military vehicles (including Tracked) for both Combat & Launcher vehicles, Generic Vehicle Architecture (GVA), and Weapon Systems.

Tata Power Distribution Projects has been certified under the Integrated Management System (IMS) (ISO 9001:2008, ISO 14001:2004, BS OHSAS 18001:2007), a globally accepted and recognized system. The certification substantiates execution excellence with quality, safety & environmental care for the benefit of business and key stakeholders including consumers.

This is a befitting accolade to the distribution projects which has exhibited exemplary performance track record with safety and quality in achieving network expansion to the tune of 600-700 kms and installation of 85 to 100 consumer substations per year within record time as directed by MERC.

Some of the innovations undertaken in operations and maintenance area include: (1) In-house Breaker Testing Kit -Due to the usage of this kit during maintenance and testing, activity maintenance time is reduced from 2 hrs to 30 min as there is no need to open breaker cover to identify the problem. (2) In-house Fuse puller tool for Kit-Kat fuses -With the development of in-house Kit-Kat fuse puller, engineering method has been developed for the process thus a maintaining safe distance from live parts. (3) Inhouse SF6 Gas filing Kit for RMU - It is observed that due to low SF6 pressure, it is imperative to replace entire RMU unit and it increases shutdown time to the consumers. (4) Trolley Mounted Substation - Here, LT Panel and RMU are installed on a trolley which can be moved anywhere as per requirement and can be used in case of breakdown of existing installed equipment.

Disconnection and Re-connection of Power Supply

Consumers disconnected due to non-payment - The details of residential disconnections for non-payment and reconnection, broken down by the duration of disconnection and by regulatory regime as on March 31, 2016 are given below:

By time between disconnection & payment				
	FY13-14	FY14-15	FY15-16	
<48 hours	903	1,034	1,163	
48 hours - 1 week	346	435	794	
1 week - 1 month	438	551	777	
1 month - 1 year	536	986	1,117	
>1 year	1	Nil	Nil	

By time from payment to reconnection						
	FY13-14 FY14-15		FY13-14	FY14-15		
		As per old SOP- 24 Hrs.	New SOP 8 Hrs.			
< 8 Hours	-	-	2,588	3,793		
< 24 hours	2,192	253	NA	NA		
24 hours - 1 week	32	1	173	60		
(as per old SOP)						
8 hrs - 1 week						
(as per new SOP)						
week	0	Nil	Nil	Nil		

Service Interruption

The service interruptions frequency and duration that the consumers have faced is given in the table below:

Power outage frequency and Average Power outage duration	FY 13-14	FY 14-15	FY 15-16
Average number of interruptions that a customer would experience,	1.69 times	1.104 times	0.828 times
measured in units of interruptions per customer (SAIFI)			
Average outage duration for each customer served, measured in units of	29.48 minutes	17.83 minutes	13.75 minutes
time, often minutes or hours. (SAIDI)			
Average time taken for restoration of power supply measured in terms of	17.42 minutes	16.16 minutes	16.6 minutes
minutes per affected customer. This is a Benchmark for this parameter			
(CAIDI)			

Customer Satisfaction

Customer Satisfaction Surveys are key indicator parameters to measure customer satisfaction and dissatisfaction levels. The surveys are conducted on a quarterly basis across all segments, i.e. commercial, industrial and residential consumers. The findings of the report guide us to understand the key improvement areas which are shared with the concerned departments and accordingly the necessary action is taken based on the key findings. Overall Customer Satisfaction Assessment Total (CSAT) score in percentage for the reporting year are given below;

Customer Satisfaction					
Score (%)	FY13-14	FY14-15	FY15-16		
Residential	83	83	85		
Industrial	87	77	80		
Commercial	86	81	79		

Tata Power has always been committed to providing quality and uninterrupted power to its consumers and is a pioneer in the application of innovation and technology for value added benefits to its customers. In line with its commitment to constantly innovate for the benefit of its consumers, the Company has implemented GIS in Mumbai in past which provides a comprehensive view of Tata Power's network elements with geographic advantage. The purpose of this technology is to help in the locationbased analysis for numerous business processes, short and long term distribution business planning including network feasibilities, technical planning, designing and implementation of distribution projects, network monitoring, customer acquisition and compliance to regulatory queries. Tata Power has now integrated GIS with other Enterprise Systems such as SAP, Electronic Land Record Managements System (eLRMS), Network Planning System, Distribution Management System (DMS), Customer Relationship Management (CRM), Vehicle Tracking System (VTS) and Personal Digital Assistant (PDA). This integration helps Tata Power augment workflow management, automated updation of data, synchronisation and tracking of equipment/asset information. The highlight of some of the integration

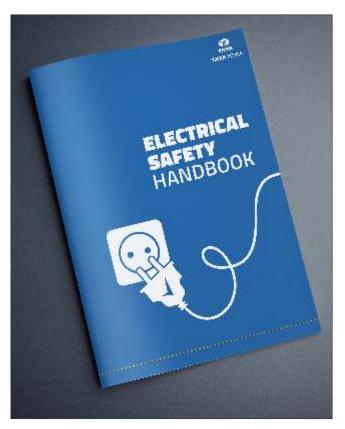
system is the proactive real-time monitoring and analysis of power failure complaints by the Tata Power Call Centre which ensures speedy restoration of power and enhances customer satisfaction. Further, implementation of Personal Digital Assistant for meter data collection has resulted in a quick and accurate mapping of new meter locations in GIS. The integration of GIS with Network Analysis System and DMS has resulted in the modeling of the networks more closely and accurately to physical property which has ultimately aided planning, designing, operations with data consistency and common network models.

Health and Safety Practices

Tata Power believes good safety is one of the key parameters which helps sustain business performance. Tata Power has always ensured that safe practices are followed by the employees together with educating its customers on safety parameters. Street plays are organised on safety for citizens living near high transmission lines in Mumbai.

Tata Power endeavours to make the neighbourhood safe through wireman training. The consumers always long for a good quality Electrician to service their day to day needs. Thereby to cater to the above, Tata Power launched a Wiremen Training Programme for residential consumers.

Electrical Safety Handbook - Continuing with its efforts, Tata Power released a 'Household Electrical Safety Handbook' along with safety training for its consumers in Mumbai. The objective behind this initiative is to provide a unified solution to consumers' concerns related to household safety and address the diverse challenges faced in case of high rise buildings. The Company through this educative handbook aims to advise on safety guidelines for household electrical appliances, maintenance and testing of electrical installations, practices to prevent fire, lift safety and steps to follow in case of a fire. Total 25 fire safety training were conducted for high rise building in Mumbai area and 655 Electrical Safety Handbooks were distributed after training to high rise building residents.



Compliance

Health and Safety Regulations - At Tata Power, the goal is to deliver 100% conformance to compliance with

regulations of product and service; voluntary codes concerning health and safety; product information and labelling.

Organisation complies with the existing regulations for responsible operations related to the environment, social and governance. It understands the potential environmental, health and safety risks associated with the business and its stakeholders. Regular and systematic engagement with customers is ensured and the suggestions are incorporated in the improvement of policies or processes.

Product and Service Information - Customer centricity, information security and delivering high quality and timely information are integral parts of the solution. There have been no complaints pertaining to the breach of customer privacy and loss of customer data. It is believed that providing accurate and appropriate information enhances the quality and productivity of power distribution. Thus it is an endeavour to comply with mandatory disclosures and ensure that all electrical installation is labelled as warranted. The information stated in products and services and on product brochures clearly list out the known potential utility risks and mention ways to disseminate or eliminate such risks.



Care for Community



Reinforcing its commitment towards sustainability, Tata Power will continue to strive to carry its CSR legacy towards 'Sustained Inclusiveness' and being a 'neighbour of choice'. The Tata Power Community Development Trust (TPCDT) which has been the development vehicle of Tata Power CSR Initiatives has worked closely with local communities and civil society, academia and local government bodies.

In the year 2015, Tata Power was ranked 2nd in CSR by Economic Times and IIM Udaipur Survey for CSR Initiatives 2014. Model Village programmes focused on water management at Kadachimate (Maharashtra), Solar Micro Grid connectivity at Maval and Mulshi (Maharashtra), promoting education and livelihood at Delhi & Kalinganagar (Odisha) in addition to improving agricultural productivity and women empowerment at Jamshedpur (Jharkhand), Haldia (West Bengal) & Maithon (Jharkhand).

Under Affirmative Action, Tata Power has committed to reaching out to 25% SC/ST population across all locations to empower remote communities. Livelihood, girl child education, entrepreneurship development through fly ash brick making and vocational courses were upscaled during the year. This year also marked the commencement of four state-of-the-art Tata Power Skill Development Institutes in Gujarat, Maharashtra and Jharkhand wherein more than 17,000 work days were generated through 16 different vocational courses.

Tata Power Employee Volunteering Mission (ARPAN) saw a surge in volunteering hours generated by employees in various community engagement initiatives including Mass Plantation drives across plant locations. Going beyond neighbourhood, Tata Power extended support towards Tamil Nadu Flood Relief and disaster relief work at Nepal and Georgia.

CSR Thrust Areas

Tata Power believes a vibrant society is the progressive one for a Company's sustainable business growth. To ensure that the social canvas in which the Company operates, continues to be rich and multifaceted, Tata Power invested in five primary palettes of change. It has been nurtured and branded coherent with the community development initiatives covered under the following Thrust Areas:



Outreach

In this reporting year, Tata Power has operated in eight states of the country (i.e. Maharashtra, Jharkhand, Odisha, West Bengal, Gujarat, Bihar, Karnataka and Tamil Nadu) covering more than 250 neighbouring villages/urban area/habitations, and also in Delhi. The company has reached out to half a billion people across locations through its community development initiatives.

CSR Highlights

In line with its nationalistic spirit, Tata Power believes in the growth of the nation through the growth and empowerment of each of its citizens - whether in the rural or urban areas. The cornerstone of growth lies in Education and Health - these are the two mainstay initiatives that have gathered momentum across all the operative areas.

The company has also initiated focused education towards Employability and Entrepreneurship with the Tata Power Skill Development Institute (TPSDI). TPSDI aims to benefit over thousands of Power Sector workers through various skills training programmes and bridge the existing skill gap in the value chain through concerted efforts thereby fuelling India's growth and building it as a monument of excellence.

In addition, as a special centenary year contribution, Tata Power has identified several new programmes for community development in the areas of sustainable livelihood, organic and integrated agricultural methods, afforestation, infrastructure and organised community economic welfare such as women Self Help Groups (SHGs) etc. Tata Power has been able to touch the lives of several thousand tribals, scheduled castes and tribes, farmers, fishermen cattle owners and rural women through these initiatives. Through the various interventions, the company is able to touch the lives of human beings at the very core of their existence - leading the way towards progress, educating, following up on their progress up the value chain.

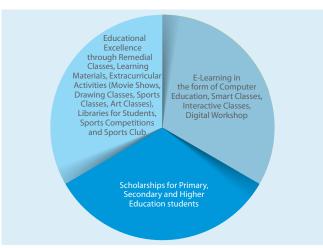
An important aspect here is the upliftment of the status of women in society - right from creating awareness about the right of education, propagating the health care of women, especially expectant and pre-natal care, as well as creating avenues for livelihood where women play an active role in contributing to the family income.

Tata Power has initiated grassroots level programmes where awareness about various government social welfare schemes and benefits is brought to the eligible beneficiaries. Tata Power has managed to touch many lives by facilitating key Government schemes providing social security for workers from unorganized sectors and their families. The company has engaged with various NGOs and partners to get villagers, farmers, women engaged and enrolled in such schemes - where they can avail benefits like insurance, scholarships, employment based on caste certificates, etc.

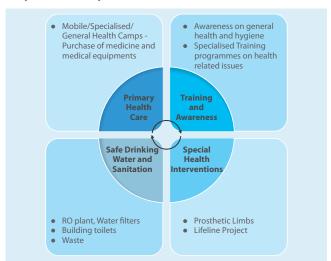
The thrust area wise activities undertaken in this reporting year are as follows:

 Augmenting Primary Education System with emphasis on Girl Child Education (VIDYA)

In FY16, the company reached out to schools covering over 2 lakh students through various educational initiatives such as:



Building and Strengthening Healthcare Facilities (AROGYA) including Safe Drinking Water (SWATCHJAL)



3. Enhancing Programmes on Livelihood (SAMRIDDHI) & Employability (DAKSH)



4. Building Social Capital and Infrastructure (SANRACHNA)

In FY16, reached out to more than 84,500 beneficiaries through various initiatives under Social Capital and





















5. Nurturing Sustainability for Inclusive Growth (AKSHAY)

In FY16, reached out to more than 2,44,000 beneficiaries through the following programs



Employee Volunteering

Aligning with the company's value of 'Care for Community', Tata Power has sowed and fostered community development by motivating employees for devoting skillsets and time, under ARPAN - an initiative for employee volunteering. The company has always supported social causes and encouraged employees to participate in various Initiatives which have panned across various cross sections of topics from Energy Conservation, Healthcare and Education etc. Currently, there are 1,000+ registered volunteers on the Tata Engage website across Tata Power. To promote employee volunteering across all locations of Tata Power, Tata Power ARPAN Annual Awards have been constituted with the aim of institutionalizing efforts through employee volunteering and recognition of divisions for exemplary work in volunteering. An external jury panel is instituted to undertake the assessment of the Volunteering Applications from all locations and develop a framework for the same. Mulshi division bagged the Tata Power Arpan Award in the year 2015 for the initiatives undertaken in the year 2014-15.



Mumbai Marathon - A Run for a Cause

A horde of Tata Power volunteers ran on the streets of Mumbai pledging their support towards cancer patients battling for life at the Tata Memorial Hospital. It was the day of the Mumbai Marathon. A most dreaded disease, the mystery around cancer is compounded by the fact that it stays undetected for long, and the treatment is unaffordable by many. About 100 volunteers have also been spending their time to spread awareness about cancer. Funds were contributed to the Tata Medical Centre Trust.

Disaster Relief Program

The 2015 Chennai floods resulted from heavy rainfall generated by the annual northeast monsoon in November-December 2015. They affected the Coromandel Coast region of Tamil Nadu and Andhra Pradesh, and the city of Chennai was particularly hard-hit. More than 500 people were killed and over 18 lakh (1.8 million) people were displaced. Tata Power took up relief efforts at the ground level in the worst affected areas. From arranging supplies like water bottles, snacks, milk, mosquito coils and medicines, to emergency essential materials like tarpaulins and woollen blankets. Tata Power volunteers worked at the back end to reach relief materials to the disaster-hit areas. Emergency Medicines and health drinks were distributed at the health camp. Critical relief materials were also distributed to the flood-affected people at one of the project sites, where 2,000 families benefitted from the initiative.

Affirmative Action (AA)

Tata Power has endeavoured to positively empower the lives of communities around its areas of operation. In line with the Tata Group belief that addressing the social needs of traditionally disadvantaged groups is the 'right thing to do' and as part of Tata Power's nation building endeavour, the company has carved out a focused approach for the upliftment of these communities through Affirmative Action. Tata Power has aligned its AA programs to Employment, Education, Essential Amenities, Employability and Entrepreneurship, 5 Es for the development of deprived communities particularly SCs & STs. Some AA highlights:

5Es	Target	Actual	%
Employment	63	43	68
Entrepreneurship	215	276	128
Employability	364	250	69
Education	1,420	1,321	93
Essential Amenities	1,400	983	70
TOTAL	3,462	2,873	83

Overall Impact

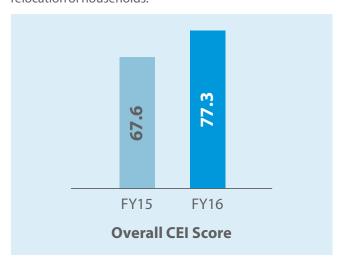
The overall impact of CSR initiatives was measured through the Community Engagement Index (CEI) tool which was used to determine engagement levels of the various stakeholders across the stages of the CR intervention. In the reporting year RASCI Model (Responsible, Approve, Support, Consulted and Informed) was customized to determine engagement levels of the various stakeholders across stages of CSR intervention.

Trombay	Mulshi (Bhira)	Maithon	Haldia	Jojobera
63.5	79.5	72	94	77.5

In the reporting year, Trombay was added as a new location to conduct the study. The criteria for selecting these locations depended upon the maturity of the project running for minimum 2 years and sustainable continuation of the project for the next 2 years. It has shown a 10% increase over last year.

Managing Relocations

Tata Power has always remained cognizant of potential sites for assessing the socio-economic impact and working closely with communities. Before selecting a site, studies are conducted which include demographic, economic, political, cultural and social aspects. On the Begunia front, the Company has continued assessment on various aspects pertaining to the proposed site and business proposition has maintained an evolving stage in the reporting year. In this reporting year, at Maithon, there has been no relocation of households.



CASE STUDIES

Digital Learning - The Way Forward

It's the age of smart phones, smart children - so how can the classrooms be left behind! Various innovative and comprehensive educational solutions are adopted by Tata Power to bring e-learning into the lives of students in various pockets of states. The initiative helps in the holistic development of the students with innovative teaching aids to address their educational habits and is currently reaching out more than 69000 students. The use of computer-aided learning stations has witnessed exemplary academic performance among the students in the past. The overall results in the curricular subjects of the students have improved significantly with the help of innovative tools. More and more children are enjoying their school life where every subject is now a favourite one! Tata Smart Class was launched with the aim of innovatively using technology to improve learning outcomes for children through interactive learning. With a highly energized team of multi-disciplinary specialists, Tata Smart Class constantly innovates in pedagogy, technology and content aimed at enhancing learning experiences for CBSE, ICSE and various State Board schools in the K12 education landscape in India.



Ghar Ghar mein Sauchalaya

Taking a cue from the government's slogan for 'Ghar ghar mein Sauchalaya', Tata Power has taken up the initiative of creating Defecation Free Villages. The initiative is not restricted to building toilet blocks in the villages, but also addressing the need for awareness of hygiene, maintenance of the toilets and changing age-old practices and rigid mindsets.

CSR Statistics	FY 13-14	FY 14-15	FY 15-16
No. of Volunteers	1,462	1,655	1,041
Employee Volunteering Hours	9,722	8,086	11,552
CSR Expenses in Rs. Million	256.8	493	290.1
CSR Expenses for Social Capital and Infrastructure (in Rs. Million)	54.13	98.18	22.9



The poor hygienic conditions of villages near Jojobera, Mulshi, Haldia, Mundra and other locations instilled the requirement to take up this project on priority. Poor sanitation practices had been affecting the quality of life of the villagers and causing enormous hardship especially for women and girls. In partnership with NGOs and welfare organizations, the sanitation projects were initiated in 2015. The project adopts the "Community-Led Total Sanitation" model through awareness creation, demand generation for improved sanitation and hygiene behaviours resulting in the construction of functional toilets at the individual household level. The following objectives have been met with the total involvement of the communities: - Open defecation free villages, Awareness and behaviour change on sanitation and hygiene issues, Development of skilled manpower as masons for postconstruction services for improved and sustainable sanitation services, Adoption of safe hygiene practices and facilitate construction of toilets in each household.



Highlights

- 35 RO plants installed at government schools, Jhuggi Jhopri clusters & Delhi Metro Railway station providing potable drinking water to nearly 1,64,000 individuals every day.
- Building of toilets at 12 schools and 900 households in Odisha.
- Revamping water supply system and groundwater aguifer benefitting 210 households in Odisha.

- Repairing of 25 hand pumps and construction of 11 soak pits at Tiruldih, Jharkhand
- 9,229 households built toilets to end zero open defecation.

Life Line Express

Tata Power, in partnership with Impact India Foundation, hosted the Lifeline Express (first hospital on train) at Kumardhubi Station in Jharkhand. Lifeline Express is the world's first State-of-the-art hospital on a train and has changed the lives of thousands of underprivileged people and has so far provided medical services to about a million disabled poor - all free of cost and made possible by the volunteer services of about 200,000 medical professionals across India and abroad.



The Lifeline Express consists of coaches equipped with sophisticated medical and surgical facilities to provide on-the-spot diagnostic medical and surgical treatment. This initiative received full support from local panchayats, school teachers and local communities in making it a complete success by participating and making use of the facilities provided. Approximately 50,000 people have benefited from this initiative."



Highlights

- 10 Specialist Doctors
- 20 General Doctors

- 23 Paramedics Stationed
- 77 Surgeries
- More than 50,000 patients treated
- Specially equipped to detect cancer, operate eye cataract and perform orthopaedic corrective surgery
- Houses diagnostic machines and surgical rooms

Tribal Girls go to school

Kalinga Institute of Social Sciences (KISS) is the largest residential institute for tribals in the world, providing accommodation, food, health care, and education from Kindergarten to Post Graduation, vocational training and all other basic amenities of life, including job facilities after completion of education. 20 tribal girl children were identified from nearby villages of Kalinganagar and joined hands with the KISS for their education from standard 4th to 10th. Students are provided with all facilities such as food, clothing, medicines, study materials, books, notepads etc.

Sewing up the social gaps

A vocational training aimed at women addresses their emotional and psychological needs and gives them the skills they need to achieve economic stability for themselves and their families. Such skills can be life changers, helping women - especially in countries like India, where the gender social divide is very large - to gain confidence and an economic status. Tata Power has chalked out various skill development programmes aimed at women, such as tailoring, beauty services, assistant nursing. Tata Power implemented six months tailoring, and three months fashion designing courses, with fully equipped centres having sewing machines, other material and able trainers. The courses have helped them become self-reliant through skill development on sewing, tailoring and basic fashion designing, thus creating employment opportunities for disadvantaged adolescent girls and women.



After the training, the women can:

- Profit from their products
- Apply marketing and management skills learned in the training

Increase awareness about the tailoring programmes and enable the empowerment of other women in their communities.

Solar Micro grid

Three 5W LED lights were provided to 310 Households in 5 Villages on unique "pre-paid" model. The rains beckon good luck, happiness and new beginnings. Not so for the 310 households living in villages of Maval & Mulshi, Maharashtra. Rains mean further power cuts and days on end without electricity. This is, apart from the weekly load shedding that they have to bear! Tata Power has taken up the responsibility of providing Solar Micro Grids to these villages. The micro grid installation is managed by the communities and uses a unique "pre-paid" model for utilization.



GRI G4 Content Index

General Standard Disclosures	Disclosure Requirements	Page Number/Link	Remarks	External Assurance
Strategy and Analysis				
G4-1	CEOLetter	4-5	•	
G4-2	Key impacts, risks, and opportunities	4-5, 20		
Section: Organizational Profile				
G4-3	Organization name	4		
G4-4	Primary brands, products, and services	9-10		
G4-5	Headquarters location	back cover		
G4-6	Where the organization operates	9-11		
G4-7	Nature of ownership and legal form	20	•	
G4-8	Markets served	9-11		
G4-9	Scale of the organization	9-11		
G4-10	Total number of employees by type	31-33		
G4-11	Collective bargaining agreements	30		
G4-12	Supply chain description	11, 27, 45-46		
G4-13	Organizational changes during the reporting period	9		
G4-14	Precautionary principle	20		
G4-15	External charters, principles, or other initiatives	6, 22		
G4-16	Membership associations	22		
Section: Stakeholder Engagement				
G4-17	Entitles included in financial statements	6-11		
G4-18	Process for defining report boundaries and content	6-11		
G4-19	Material aspects included in the report	25-26		
G4-20	Descriptions of material aspect boundaries within the organization	25-26		
G4-21	Descriptions of material aspect boundaries outside the organization	25-26	,	
G4-22	Restatements	9		
G4-23	Changes from previous reports in terms of scope and/or boundaries	9		
GA-2A	Cerbaladar aranna	26-38		
64.25	June 1- John John John John John John John John	25.25		
24-26	Township were instituted and the second of t	26-28		
64-27	ryppioacus o autorismos and a suggestion of the	26-28		
Sertion: Report Profile	וקטונטן מוסיבע ממווווא סיממבו ביואסאבוויבונים	0.50.50		
G4-28	Reporting period	9		
64-29	happy may period. Data of most renort	ی ر		
G4-30	Reporting cycle	9		
G4-31	Report contact	8	,	
64-32	"In accordance" option, GRI Index and report assurance	9		
G4-33	Policy regarding report assurance	8	٠	
Section: Governance				
G4-34	Governance structure of the organization	17-20		
G4-35	Process of authority delegation	17-20		
G4-36	Executive level position for sustainability reports to Board	17-20		
G4-37	processes for consultation between stakeholders & Board	17-20		
G4-38	Composition of Board & Committees	17-20		
G4-39	If Chair of the Board is executive	17-20		
G4-40	Nomination and selection process for Board	17-18		
G4-41	Process for Board conflict of interest avoidance	17-20		
G4-42	Board and senior executives roles in strategy	17-20		
G4-43	Measures to develop Board's sustainability knowledge	17-20		
G4-44	Process for evaluation of Board's performance writ sustainability	17-20		
G4-45	Board's role in sustainability management, due diligence	23-26		
G4-46	Board's role in sustainability risk management	23-26		

General Standard Disclosures	Disclosure Requirements	Page Number/Link	Remarks	External Assurance
64-47	Francon of Roard's sustainability risk raviaw	73-76	,	
G4-48	Highest committee/position that reviews sustainability report & ensures material completeness	8		
G4-49	Process for communicating critical concerns to Board	23-26	٠	
G4-50	Total complains to Board and resolution mechanism	23-26		
G4-51	Remuneration policies of Board and senior executives	17-18	1	
G4-52	Process for determining remuneration	17-18	1	
G4-53	Report how stakeholder views are taken on remuneration	17-18	1	
G4-54	Ratio of annual mean compensation of highest paid individual to median salary	17-18		
G4-55	Ratio of increased in above parameter G4-54	17-18		
Section: Ethics & Integrity				
G4-56	Code of conduct	21-22		
G4-DMA	Disclosures on management approach (DMA)	at respective indicators		
Category: Economic				
G4-EC1	Economic value	45		
G4-EC2	Climate change risks	23, 35-36		
G4-EC3	Benefit plan coverage	44		
G4-EC4	Financial assistance from the government	45		
G4-EC5	Ratio of entry level wage to local minimum wage	45	1	
G4-EC6	Proportion of senior management hired from the local community	31-32	1	
G4-EC7	Infrastructure investments	45-46		
G4-EC8	Indirect economic impacts	45-46		
G4-EC9	Local suppliers	45		
Category: Environment				
G4-EN1	Materials by weight or volume	35		>
G4-EN2	Recycled input materials	35		
G4-EN3	Energy consumption within the organisation (Scope 1 + 2)	36-37		>
G4-EN4	Energy consumption (Scope 3)	36-37		
G4-EN5	Energy intensity	37		>
G4-EN6	Energy reductions	36-37		
G4-EN7	Energy reductions in products and services	, ;	Not applicable	
G4-EN8	Water withdrawals by source	37	1	>
G4-EN9	Water sources affected by withdrawals	37		
0.4-60.0	Waterrec'yded and reuser	3/		
64-EN11	Paclifices in or hear areas of high diversity	38-39		
G4-EN 12	Impacts on blodiversity	30 20		
G4-FN14	UNION BEAT IST SPECIAL	38-39		
G4-EN15	Direct GHG emissions (Scope 1)	35-36	٠	>
G4-EN16	GHG emissions (Scope 2)	35-36		>
G4-EN17	GHG emissions (Scope 3)	35-36		
G4-EN18	GHG emissions intensity	35-36		
G4-EN19	Reduction of GHG emissions	35-36		
G4-EN20	Ozone-depleting substances (ODS)	35		
G4-EN21	NOx, SOx and other emissions	35		>
G4-EN22	Water discharge	37		
G4-EN23	Waste by type and disposal method	38		>
G4-EN24	Significant spills	38	1	
G4-EN25	Hazardous waste	38	•	
G4-EN26	Biodiversity affected by runoff	38-39		
G4-EN27	Mitigation of environmental impacts of products and services	34-35		
G4-EN28	Products and packaging materials reclaimed	1	Not applicable	

General Standard Disclosures	Disclosure Requirements	Page Number/Link	Remarks	External Assurance
G4-EN29	Environmental fines and sanctions	21		
G4-EN30	Environmental impacts from product distribution and employee travel	11,36	,	
G4-EN31	Environmental investments	34	٠	>
G4-EN32	New suppliers screened using environmental criteria	27		
G4-EN33	Supply chain environmental impacts	27		
G4-EN34	Environmental grievances	34		
Category: Social - Labour Relations	Misselve and under of morrisone bring himseries	22 22		`
04-LA-	Number and age of mew employee files and tumover	32-33		>
G4-LA2	Senents provided to full-time employees	30		,
G4-LA3	Ketum to work and retention rates after parental leave			>
04-LA4	Notice periods regarding operational changes	30	٠	
G4-LA5	Vorkforce represented in health and safety committees	45		×
64-LA6	kares or injury, occupational disease, lost days, absenteeism, and work-related ratalities	42-43		>
G4-LA/	Workers with high incidence risk of diseases	42-43		
G4-LA8	Health and safety topics covered in agreements with trade unions	42		,
G4-LA9	Average hours of training for employees	33		>
G4-LA10	Programs for skills management managing career endings	' (Z	
64-LAII	Employees receiving performance and career development reviews	30		
G4-LA12	Composition of governance bodies and employees	17, 31		
G4-LA13	Ratio of basic salary and remuneration of women to men	30		
G4-LA14	New suppliers that were screened using labor practices criteria	27		
G4-LA15	Negative impacts for labor practices in the supply chain	27		
G4-LA16	Grievances about labor practices	27, 43		
Human Rights				
G4-HR1	Investment agreements and contracts that include human rights clauses or underwent screening	27, 43		
G4-HR2	Employee training on human rights	22,33		
G4-HR3	Incidents of discrimination	22		
G4-HR4	Significant risk of freedom of association in operations and suppliers	22, 27		
G4-HK5	Significant risk of child labor in operations and suppliers	22, 27		
G4-HR6	Significant risk of forced or compulsory labor in operations and suppliers	22, 27		
G4-HR7	Security personnel trained in the organization's human rights policies	22		
G4-HR8	Incidents of violations involving rights of indigenous peoples		Not applicable	
G4-HR9	Operations that have been subject to human rights assessments	21	•	
G4-HR10	New suppliers screened for human rights	27		
G4-HR11	Human rights impacts in the supply chain	27	٠	
G4-HK12	Grievances about numan rights impacts	77		
Society		טעני		
64-502 64-502	Local Community engagement, impact assessments and development programs Negative impacts on local communities	33-80		
G4-S03	Risks related to corruption	21-22	٠	
G4-S04	Communications and training on anti-corruption	21-22		
G4-S05	Confirmed incidents of corruption	21-22		
G4-S06	Political contributions	22		
G4-S07	Anti-competitive behaviour	22	•	
G4-S08	Fines for non-compliance with laws	21		
G4-S09	New suppliers screened for impacts on society	27		
G4-S010	Negative impacts on society in the supply chain	27		
G4-S011	Grievances about impacts on society	27		
Product Responsibility				
G4-PR1	Health and safety impact assessments of products and services	53		
G4-PR2	Non-compliance concerning the health and safety impacts of products and services	54		
G4-PK3	Product and service information required for labelling	5.1		
G4-PR4	Non-compliance with regulations concerning product and service labelling	51	1	
G4-PK5	Surveys measuring customer satisfaction	49, 55		

General Standard Disclosures	Disclosure Requirements	Page Number/Link	Remarks	External Assurance
G4-PR6	Sale of banned or disputed products	47-49	,	
G4-PR7	Non-compliance with regulations concerning marketing communications	51	,	
G4-PR8	Complaints regarding breaches of customer privacy and losses of customer data	51	,	
G4-PR9	Fines for non-compliance with laws and regulations concerning products and services	51	ı	

Electric Utility Sector Specific (EUSS) Supplement Indicators Index

Reference	Indicator	Page Number	Remarks	External Assurance
EU 1	Installed Capacity	11		
EU 2	Net energy output	11-12		
EU 3	Number of residential, industrial, institutional and commercial customers	48		
EU 4	Length of above and underground transmission and distribution lines	48	٠	
EU 5	Allocation of CO _{se} emissions allowances or equivalent, broken down by carbon trading framework	36		
EU 6	Management approach to ensure short and long-term electricity availability and reliability	49		
EU 7	Demand-side management programs	49		
EU 8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	51-52	٠	
EU 9	Provisions for decommissioning of nuclear power sites	·	Not applicable	
EU 10	Planned capacity against projected electricity demand over the long term, broken down by energy source	11-12	1	
EU 11	Average generation efficiency of plants by energy source	13-14		
EU 12	Transmission and distribution losses as a percentage of total energy	48	1	
EU 13	Biodiversity of offset habitats compared to the biodiversity of affected areas	38-39		
EU 14	Programs and processes to ensure the availability of a skilled workforce	26-27	,	
EU 15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	33		>
EU 16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	40-41	1	
EU 17	Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	42		
EU 18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	42	,	
EU 19	Stakeholder participation in the decision making process related to energy planning and infrastructure development	26		
EU 20	Approach to managing the impacts of displacement	58		
EU 21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	20, 41		
EU 22	Number of people physically or economically displaced and compensation, broken down by type of project	58	1	
EU 23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	47-54		
EU 24	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services	47-49		
EU 25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	53-54		
EU 26	Percentage of population unserved in licensed distribution or service areas	48		
EU 27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	52-53		
EU 28	Power outage frequency	13	,	
EU 29	Average power outage duration	13		
EU 30	Average plant availability factor by energy source	14		

United Nations Sustainable Development Goals Index

With the launch of Sustainable Development Goals (SDGs), the businesses are expected to align their core business to the SDGs to achieve a sustainable future. Tata Power has embarked on this journey and some of the Tata Power initiatives already in alignment to SDGs has been mapped and are presented below.

UN SDG	Coverage in report
1 NO POVERTY TATTO	19, 30, 44-46, 55-60
2 ZERO HUNGER	19, 55-60
3 GOOD HEALTH AND WELL-BEING	30, 40-43, 45, 55-60
4 QUALITY EDUCATION	26-27, 29-30, 33, 45, 50
5 GENDER EQUALITY	30-33 55-60
6 CLEAN WATER AND SANITATION	35, 37, 39 45, 55, 57, 59
7 AFFORDABLE AND CLEAN ENERGY	5 47-53 55-60
8 DECENT WORK AND ECONOMIC GROWTH	44-46 29-30 40-42
9 INDUSTRY.INNOVATION AND INFRASTRUCTURE	10-14 47 51-52

UN SDG	Coverage in report
10 REDUCED INEQUALITIES	30-33 45-46 55-60
11 SUSTAINABLE CITIES AND COMMUNITIES	12-13 47-54 55-60
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	34-38
13 CLIMATE ACTION	12 35-37
14 LIFE BELOW WATER	37 38-39
15 UFE ON LAND	56 57-59
16 PEACE JUSTICE AND STRONG INSTITUTIONS	16-22 34 55-60
17 PARTNERSHIPS FOR THE GOALS	6 22 23 56 59

Assurance Statement

Price Waterhouse Chartered Accountants LLP

Independent practitioner's limited assurance report To the Board of Directors of Tata Power Company Limited

We have undertaken to perform the following assurance engagements for Tata Power Company Limited (TPCL) vide agreement dated October 10, 2016 and the addendum thereto dated January 24, 2018 (the 'agreement') in respect of selected sustainability indicators ("Identified Sustainability Indicators") as identified in the Global Reporting Initiatives (GRI) G4 ('GRI G4') Content Index on pages 61-64 of the Sustainability Report for the year ended March 31, 2016 ('the Sustainability Report'):

- Limited Assurance under ISAE 3000 in respect of the Identified Sustainability Indicators.
- Moderate level of Assurance under AA1000 Assurance Standards in respect of the Principles of inclusivity, materiality and responsiveness as defined in the AccountAbility Principles Standard (2008) (the "AA1000 AccountAbility Principles") and reliability of the specified information with regard to the identified sustainability indicators.

Identified Sustainability Indicators

The Identified Sustainability Indicators are summarized below:-

Indicator Number	Indicator Description			
Environment	8			
G4-EN1	Materials used by weight or volume			
G4-EN3	Energy consumption within the organization			
G4-EN5	Energy intensity			
G4-EN8	Total water withdrawal by source			
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)			
G4-EN16	Indirect greenhouse gas (GHG) emissions (scope 2)			
G4-EN21	NOx, SOx, and other significant air emissions			
G4-EN23	Total weight of waste by type and disposal method			
G4-EN31	Total environmental protection expenditures and investments by type			
Labour practices an	d decent work			
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region			
G4-LA3	Return to work and retention rates after parental leave, by gender			
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region			
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender			
G4-LA9	Average hours of training per year per employee by gender, and by employee category			

Criteria

The criteria used by TPCL to prepare Identified Sustainability Indicators are:

Criteria 1: Global Reporting Initiatives G4 Sustainability Reporting Guidelines ("GRI G4 Guidelines") as stated on page 4 of the Sustainability Report.

Price Waterhouse Chartered Accountants LLP, Building No. 8, 7th & 8th Poor Tur-Gurgaon - 122 002

T: +91 (124) 4620000, 3060000, F: +91 (124) 4620620

Registered office and Head office: Sucheta Bhawan, 11A Vishnu Digambar Marg, New Delhi 110 002

Price Waterhouse (a Partnership Firm) converted Into Price Waterhouse Chartered Accountants LLP (a Limited Liability Partnership with LLP identity no: LLPIN AAC-5001) with effect from July 25, 2014. Post its conversion to Price Waterhouse Chartered Accountants LLP, its ICAI registration number is 012754N/N500016 (ICAI registration number before conversion was 012754N)

Cyber City

INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT Page 2 of 4

Criteria 2: AA1000 AccountAbility Principles Standard (AA1000APS) 2008 for determination of materiality, responsiveness and inclusivity and reliability of the specified information with regard to the identified sustainability indicators.

Management's Responsibility

TPCL's Management is responsible for identification of key aspects, engagements with stakeholders and the content and reliability of the specified information with regard to the identified sustainability indicators in respect of Criteria 2 and the preparation and presentation of the Sustainability Report in accordance with the Criteria 1 stated above. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the sustainability report and measurement of Identified Sustainability Indicators, which is free from material misstatement, whether due to fraud or expert.

Inherent limitations

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial indicators allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities. In addition, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Identified Sustainability Indicators based on the procedures we have performed and evidence we have obtained.

We have conducted our engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) [ISAE 3000 (Revised)], 'Assurance Engagements other than Audits or Reviews of Historical Financial Information', issued by the International Auditing and Assurance Standards Board and Type 2 "Moderate Level" assurance requirements of AA1000 Assurance Standards issued by AccountAbility and the Guidance for AA1000AS (2008) Assurance Providers. These standards and the Guidance require that we plan and perform this engagement to obtain limited assurance about whether the Identified Sustainability Indicators are free from material misstatement including that due to fraud or error, and to evaluate the overall presentation of the Identified Sustainability Indicators in accordance with GRI G4 Guidelines and the principles set out in AA1000 which involves assessing the suitability in the circumstances of TPCL's use of the criteria as the basis for the preparation of the subject matter and reliability of the specified information with regard to the identified sustainability indicators

Our limited assurance shall not be taken as a basis for interpreting the TPCL's performance across the scope of aspects covered in the Sustainability Report.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Identified Sustainability Indicators have been prepared, in all material respects, in accordance with the Criteria, or whether the requirements of the principles of inclusivity, materiality and responsiveness parameters of AA 1000 have been considered in the preparation of the



Assurance Statement

INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT Page 3 of 4

Identified Sustainability Indicators and reliability of the specified information with regard to the identified sustainability indicators.

The limited assurance engagement involved performing the procedures listed above pursuant to which we carried out the following specific procedures. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement:

With regard to the compliance of the Identified Sustainability Indicators with the AccountAbility Principles and reliability of the specified information with regard to the identified sustainability indicators, we conducted the following procedures:

- obtained a fundamental understanding of the application of the AA1000 principles by interviewing responsible employees for stakeholder management at TPCL
- reviewed the documentation regarding stakeholder dialogue, communication with stakeholders
- understood the materiality analysis at corporate level for analyzing and prioritizing sustainability topics and ascertaining areas for action.

With regard to the compliance of the Identified Sustainability Indicators with the GRI Guidelines, we conducted the following procedures:

- Made enquiries of TPCL's management, including the Sustainability team, Corporate Social Responsibility (CSR) Team and those with responsibility for CSR management and Sustainability reporting;
- Understood and evaluated the design of the key structures, systems, processes and controls for managing, recording and reporting on the selected sustainability indicators.
- Reviewed Sustainability Report for detecting, on a test basis, any major anomalies between the information reported in the Sustainability Report on performance with respect to Identified Sustainability indicators and relevant source data/information
- Reviewed materiality analysis and stakeholder Agreement followed by the Company in preparing the Sustainability Report
- Our review covered the corporate office in Mumbai and 3 project sites as identified by the
 management i.e. Khopoli, Mundra and Trombay. Performed limited substantive testing on a
 sample basis of the Selected Indicators at corporate head office, and in relation to the 3 sites
 visited, to check that data had been appropriately measured, recorded, collated and reported; and
- Considered the disclosure and presentation of the agreed Indicators/ parameters.
- Obtained representations from TPCL's Management.

Exclusions

Our limited assurance scope excludes the following and therefore we do not express a conclusion on the same:

- Operations of the company other than those included in the reporting boundary
- Information other than those specified under 'Identified Sustainability Indicators'
- Aspects of the Report and the data/information (qualitative or quantitative) other than the identified Sustainability indicators above.
- Data and information outside the defined reporting period i.e. April 1, 2015 to March 31, 2016.
- The company statements that describe expression of opinion, belief, aspiration, expectation, aim or future intentions provided by TPCL

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is



INDEPENDENT PRACTITIONER'S LIMITED ASSURANCE REPORT Page 4 of 4

founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that:

- (a) TPCL's Identified Sustainability Indicators contained in the Sustainability Report for the year ended March 31, 2016 are not prepared, in all material respects, in accordance with the Global Reporting Initiatives G4 Sustainability Reporting Guidelines.
- (b) TPCL does not have systems and processes in place to comply with the principles of AA 1000 i.e. inclusivity, materiality and responsiveness in the preparation of the Identified Sustainability Indicators and reliability of the specified information with regard to the identified sustainability indicators.

Restriction on Use

Our limited assurance report has been prepared and addressed to the Board of Directors of TPCL at the request of the company solely to assist the company in reporting on the Sustainability performance and activities. Accordingly we accept no liability to anyone, other than TPCL. Our deliverables should not be used for any other purpose or by any person other than the addressees of our deliverables. The Firm neither accepts nor assumes any duty of care or liability for any other purpose or to any other party to whom our Deliverables are shown or into whose hands it may come without our prior consent in writing.

For Price Waterhouse Chartered Accountants LLP Firm Registration No: 012754N/N500016 Chartered Accountants

Heman Sabharwal

Partner

Membership Number: 093263

abhaenal

Date: January 24, 2018

Place: Gurgaon

Annexure I: Details of expertise, qualification, appointment with other companies

Name	Date of appointment	Expertise in specific areas and Qualifications
Mr. Cyrus P. Mistry Chairman Non-Independent, Non-Executive	23.12.2011	Mr. Cyrus P. Mistry graduated with a degree in Civil Engineering from Imperial College, UK in 1990. In 1997, he received a M.Sc. in management from the London Business School. He is also a fellow of the Institution of Civil Engineers, London. Mr. Mistry was earlier Managing Director of the Shapoorji Pallonji Group. Under his leadership, Shapoorji Pallonji's construction business grew into a billion dollar enterprise, evolving from pure-play construction to execution of complex projects in the marine, oil and gas and rail sectors, across a number of international geographies. He joined the board of directors of Tata Sons in 2006 and was appointed Chairman of its board of directors in December 2012. In addition to being Chairman of Tata Sons, Mr. Mistry is also the Chairman of major Tata Group companies including Tata Steel, Tata Motors Limited, Tata Consultancy Services Limited, The Indian Hotels Company Limited, Tata Global Beverages Limited, Tata Chemicals Limited, Tata Industries limited and Tata Teleservices Ltd.
Dr. Homiar S. Vachha Independent, Non-Executive	13.03.2001	Dr. Vachha has a post-graduate degree and a doctorate in Economics from the University of Bombay (Gold medalist in Industrial Economics). He was the General Manager of ICICI Limited in a career spanning over 25 years. He was appointed as Nominee Director on the board of directors of the erstwhile The Andhra Valley Power Supply Company Limited in 1993. On ceasing to be such nominee director, he was reappointed on the board of directors of the company and continued as director till its amalgamation with the Issuer in 2000. He has been subsequently appointed on the Board of the Issuer in 2001. He is also on the board of other companies.
Mr. Nawshir H. Mirza Independent, Non-Executive	29.09.2006	Mr. Mirza is a fellow of the Institute of Chartered Accountants of India and was a Partner of S. R. Batliboi & Co., Calcutta. He is an advisor to Jardine Matheson Limited, Hong Kong. He is also a director on the boards of Thermax Limited, CGPL, Tata Power Renewable Energy Limited and Tata Power Delhi Distribution Limited.
Mr. Deepak M. Satwalekar Independent, Non-Executive	12.02.2008	Mr. Satwalekar was the Managing Director and CEO of HDFC Standard Life Insurance Company Limited from November 2000 till November 2008 and prior to this, he was the Managing Director of HDFC Limited from 1993 - 2000. Mr. Satwalekar obtained a Bachelors Degree in Technology from the Indian Institute of Technology, Bombay and a Masters Degree in Business Administration from The American University, Washington DC. He has considerable experience in the fields of finance, infrastructure and governance.
Mr. Piyush G. Mankad Independent, Non-Executive	03.07.2008	Mr. Mankad is a retired civil servant with a distinguished career of over 40 years in the Civil Services. He graduated with a Masters' degree from St. Stephen's College, Delhi University, and a Post Graduate Diploma in Development Studies from Cambridge University, United Kingdom. He has held a number of official positions including Counsellor (Economic) in the Indian Embassy, Tokyo; Controller of Capital Issues, Ministry of Finance; Finance Secretary, Government of India. He was the executive director for India and four other countries and board member for the Asian Development Bank, Manila until July 2004.
Mr. Ashok K. Basu Independent, Non-Executive	26.03.2009	Mr. Basu was First Class First with Honours in Economics and Political Science in the BA (Honours) Examination, University of Calcutta in 1962. He joined the Indian Administrative Service in 1965 Mr. Basu is a former Secretary to the Government of India, Ministry of Steel, Secretary - Power and Chairman of the CERC. Mr. Basu is also on the boards of other Tata companies viz. Maithon Power Limited, Tata Power Delhi Distribution Limited, Tata Metaliks DI Pipes Limited and The Tinplate Company of India Limited and was also Member (Industry and Infrastructure) of the West Bengal State Planning Commission. Mr. Basu was also elected as Chairman, South Asia Forum of Infrastructure Regulators during 2005-2006.
Mr. Pravin H. Kutumbe (Representative of LIC as Investor/Lender) Non-Independent, Non-Executive	07.09.2015	Mr. Kutumbe, is a Chartered Accountant (CA). He joined LIC in 1985 and worked in LIC Branch & Divisional Offices in the functional areas of F&A, Marketing P&GS and Investment. He headed LIC's Fiji operations from 1998 to 2002. He is also LIC's nominee on the Boards of Stock Holding Corporation of India Limited and SHCIL Services Limited.
Mr. Anil Sardana CEO & Managing Director	01.02.2011	An Electrical Engineer from Delhi College of Engineering and a Post Graduate Diploma in Management, Mr. Sardana brings with him over three decades of experience in the power and infrastructure sector and has worked with companies like NTPC Limited, BSES (prior to it becoming an ADAG group company), Tata Power Delhi Distribution (erstwhile NDPL). Mr. Sardana also served as the Executive Director (Business Development & Strategy) for Tata Power from March 1, 2007 to August 3, 2007 and continued to be on its until July 1, 2008. Mr. Sardana was the Managing Director of Tata Teleservices Limited for over 3 years from 2007 to 2011.
Mr. Ashok S. Sethi COO & Executive Director	07.05.2014	Mr. Ashok S. Sethi, is a B.Tech from IIT, Kharagpur. He was Chief - Corporate Operations Management and is also an Executive Director of Maithon Power Limited, a subsidiary of the Issuer. He has wide experience in power sector ranging from thermal and hydro generation, transmission and distribution, commercial and regulatory and also advocacy. He has been with the Issuer for the last 40 years and has deep understanding and commitment to the business and stakeholders.

Annexure II: Roles, Responsibilities and Duties of Independent Directors

Roles and Responsibilities

Assist in bringing an independent judgment to bear on the Board's deliberations especially on issues of strategy, performance (including economic, social, environment performance), risk management, resources, key appointments and standards of conduct

Bring an objective view in the evaluation of the performance of Board and management

Scrutinize the performance of management in meeting agreed goals and objectives and monitor the reporting of performance

Satisfy themselves on the integrity of financial information and that financial controls and the systems of risk management are robust and defensible

Safeguard the interests of all stakeholders, particularly the minority shareholders

Balance the conflicting interest of the stakeholders

Determine appropriate levels of remuneration of executive directors, key managerial personnel and senior management and have a prime role in appointing and where necessary recommend removal of executive Directors, key managerial personnel and senior management

Mode rate and arbitrate in the interest of the company as a whole, in situations of conflict between Management and shareholder's interest.

Duties

Under take appropriate induction and regularly update and refresh the skills, knowledge and familiarity with the Company (G443)

Seek appropriate clarification or amplification of information and, where necessary, take and follow appropriate professional advice and opinion of outside experts at the expense of the Company

Strive to attend all meetings of the Board of Directors and of the Board committees of which he/she is a member

Participate constructively and actively in the committees of the Board in which they are chairpersons or members

Strive to attend the general meetings of the Company

Where they have concerns about the running of the Company or a proposed action, ensure that these are addressed by the Board and, to the extent that they are not resolved, insist that the concerns are recorded in the minutes of the Board meeting

Keep themselves well informed about the company and the external environment in which it operates;

Not to unfairly obstruct the functioning of an otherwise proper Board or committee of the Board

Pay sufficient attention and ensure that adequate deliberations are held before approving related party transactions and assure themselves that the same are in the interest of the Company

Ascertain and ensure that the Company has an adequate and functional vigil mechanism and to ensure that the interests of a person who uses such mechanism are not prejudicially affected on account of such use

Report concerns about une thical behavior, actual or suspected fraud or violation of the Company's Code of Conduct or Ethics Policy (Conduct or Ethics Policy Pol

Acting within his authority, assist in protecting the legitimate interests of the company, shareholders and its employees are the company of the company o

Not disclose confidential information, including commercial secrets, technologies, advertising and sales promotion plans, unpublished price sensitive information, unless such disclosure is expressly approved by the Board or required by law.

Abbreviations

	A	14704	AND TO B
AA 1000	Accountability Principles Standard (2008)	MTPA	Million Tons Per Annum
ABB	Asea Brown Boveri Limited	MVA	Mega Volt Amp
ASEAN	Association of Southeast Asian Nations	MU	Million Unit
ASCI	Administrative Staff college of India	MW	Mega watts
BEE	Bureau of Energy Efficiency	MWh	Mega Watt hour
BEST	Brihanmumbai Electricity & State Transport	Nm3	Normal Cubic meter
BSC	Balance Score Card	NGOs	Non Government Organizations
CAPA	Corrective and Preventive Actions	NDMA	National Disaster Management Authority
CEO	Chief Executive Officer	NTPC	National Thermal Power Corporation Limited
CO2	Carbon Dioxide	NOx	Nitrogen Dioxide
COO	Chief Operating Officer	O&M	Operation and Maintenance
CKT Km	Circuit Kilometer	ODS	Ozone Depleting Substances
CRC	Consumer Relation Centres	OEMs	Original Equipment Manufacturers
CSS	Consumer Sub Station	OHSAS	Occupational Health and Safety Assessment
DMP	Disaster Management Plan	OMSA	Operations Management Servive Agreement
E-House	Electrical House	PAT	Profit After Tax (in economic section)
ECS	Electronic Clearing Service		Performe Achieve and Trade (in Energy
ED-O	Executive Director - Operations		section)
EDP	Executive Development Program	PM	Particulate Matter
ED	Executive Director	PMS	Performance Management System
ELCB	Earth Leakage Circuit Breaker	PMSA	Project Management Service Agreement
EPC	Engineering, Procurement & Construction	POP	Persistent Organic Pollutants
ERP	Enterprise Resource Planning	PPA	Power Purchase Agreement
EU	Electric Utilities	PPP	Public Private Partnership
EUSS	Electric Utilities Sector Supplement	PV	Photovoltaic
FDA	Fixed Duration Associates	R&D	Research & Development
FY	Financial Year	RASCI	Responsible, Approve, Support, Consulted and
GETs	Graduate Engineer Trainees	10.1501	Informed
GJ	Giga Joule	RCA	Root Cause Analysis
GIS	Geographical Information System	ROCE	Return on Capital employed
Gol	Government of India	RFP	Request for Proposal
GRI	Global Reporting Initiative	RFQ	Request for Quotation
GW	Giga Watt	RMU	Ring Main Unit
HIV	Human Immunodeficiency virus	RSS	Receiving Sub Station
HR	Human Resources	SAP	System Application & Products
IIM	Indian Institute of Management	SC/ST	Schedule Caste/Schedule Tribe
INR	Indian Rupees	SEBI	Securities Exchange Bureau of India
IPP			3
	Independent Power Producers International Oranization for Standardization	SO ₂ SPA	Sulphur Dioxide
ISO IT			Share Purchase Agreement
	Information Technologies	SPCBs	State Pollution Control Boards Tonnes of CO2 emission
ISAE	International Standard on Assurance	tCO2 e TMTC	
Luca	Engagements		Tata Management Training Centre
km	Kilometres kilo Volt	UAE	United Arab Emirates
KV		UMPP	Ultra Mega Power Plant
Kwhr	Kilo watt hour	UN	United Nations
L&T	Larsen & Toubro	UNGC	United Nation's Global Compact
LDP	Leadership Development Program	USA	United States of America
LPG	Liquified Petroleum Gas	VOC	Volatile Organic Compounds
LED	Light Emitting Diode	VOICES	Voices of Internal Customer Engagement &
LIC	Life Insurance Company of India		Satisfaction
LSHS	Low Sulphur Heavy Stock	WBCSD	World Business Council for Sustainable
MD	Managing Director	14/4	Development
MMSCMD	Million Standard Cubic feet per day	WACC	Weighted average cost of capital
MoEFCC	Ministry of Environment & Forests and Climate	XLRI	Xavier School of Management
	Change		

Feedback Form for Sustainability Report 2015-16

Your few minutes in responding the queries, can go long way in improving our disclosures and engagement with all stakeholders to deliver sustainable value.

1.	Is the information provided and ethical manner and do					s' in fair
	It's more than enough					
	Yes, it is precise, not too much	; not too little				
	No, more details could have b	een provided				
2.	What do you think about th it interesting to read and ea				ganisation making	
	The report is well structured v	vith a flow linkin	g the chapters			
	The report structure is good k	out could have be	een better			
	The report is not well structur	ed; the content l	has no flow			
3.	After reading the report, wl	,		ver's efforts in S	ustainability?	
	I think Tata Power is doing a lo	ot in Sustainabilit	ty			
	I think Tata Power is doing a lo	ot, but a lot more	e can still be don	е		
	No, I don't think Tata Power is	doing much in S	Sustainability			
4.	Can you suggest areas in wl	nich we could fu	irther improve o	ourselves in Sust	ainability?	
5.	Please rate the report in ter	ms of design an	d layout			
	Coverage in the report	Excellent	Good	Average	Poor	
	Clarity of contents					
	Data availability					
	Data representation					
	Coverage of topics					

You can also email your feedback at **sustainability.reporting@tatapower.com** or write to:

Presentation of contents

Chief Sustainability Officer
The Tata Power Company Limited
34, Sant Tukaram Road, Carnac Bunder, Mumbai - 400 009
India



Bombay House, 3rd Floor, 24, Homi Mody Street, Mumbai 400 001 Tel: 91 22 6665 8282 Fax: 91 22 6665 8801 www.tatapower.com

