

Toshiba's Commitment to Stable Power Supply FOR THE NEXT INDIA

Let's take a peek inside the house of a family living in Delhi. In the living room, next to the father watching cricket on a TV, children are engrossed in playing a video game on a PC placed on a table. In the kitchen, you can see the mother taking ingredients from the refrigerator for dinner.

In India, when people see the "TOSHIBA" logo, they automatically associate the brand with TVs and PCs. However, in order to use these products comfortably, a stable supply of electricity is indispensable. People may not know that Toshiba has contributed to build power infrastructure in India and supported the lifestyles of Indian people long before it started selling TVs and PCs in the Indian market. This newsletter is an attempt to share our efforts in this field, approaching them from several angles.

Toshiba's contribution to power and energy field in India

Toshiba Group companies in India offer complete end-to-end energy solutions that sustain everyday life – from manufacturing thermal power generation equipment at Toshiba JSW Power Systems Pvt. Ltd. (TJPS) and the renewable hydropower projects of Toshiba India Pvt. Ltd. (TIPL), to optimum energy transmission equipment from Toshiba Transmission & Distribution Systems India Pvt. Ltd. (TTDI) and reliable energy storage solutions.



Toshiba has an impressive global track record in the hydroelectric power production, including supplying hydro turbines and generators to more than 40 countries over more than 120 years. In India, where many hydroelectric power plants exist, Toshiba has delivered more than 20 turbines and more than 30 generators over a span of about 50 years, since first supplying equipment for the Umiam-I hydroelectric power plant in northeastern India in 1965.

Toshiba has also been supplying equipment for thermal power in India for more than 20 years. The first

was a 500 MW class steam turbine and generator one delivered to the Anpara B power plant in 1994. Following that, in 2012, Toshiba delivered five 800 MW class turbine and generators to the Mundra power plant, and we have continued to accumulate experience and strengthen delivery capabilities ever since. As a recent example, consider our EPC (engineering, procurement and construction) contract for the construction of the Harduaganj thermal power plant, where Toshiba is responsible for all stages of building the plant, from procurement of materials to construction work.

In India, Toshiba has also been active in T&D (Transmission and Distribution), starting with delivery of transformers for NTPC plants in the 1980s. Since first supplying GIS (Gas Insulated Switchgear) to Tata Power in 1992, Toshiba has continued to contribute to power stability in Mumbai.

High expectations for a fast-growing India

Many multi-national companies are rushing into India because it is achieving rapid economic growth, even compared to other Asian countries. Toshiba recognizes India not only as a large geographic territory, but also as uniquely positioned to serve as a gateway to countries in Southeast Asia, the Middle East and Africa. That's why India is Toshiba's hub for power systems manufacturing operations and export base— long before the government's **"Make in India and Export from India"** initiatives.



With its huge skilled workforce and a conducive business environment, India is poised to establish itself as the manufacturing hub for the World. Toshiba is committed to upgrade people's lives in India by building systems for the production and distribution of power, so as to adequately support the country's growth.

Another reason for Toshiba to focus on the power business in India is its history of delivering efficient and reliable products for power systems globally. With experience stretching back over 100 years, Toshiba can promptly respond to India's growing demand for infrastructure by establishing a consistent scheme for manufacturing and engineering of thermal power systems. Toshiba has aimed at winning full EPC contracts in India since the early 2000s.

In 2008 Toshiba established Toshiba JSW Turbine and Generator Pvt. Ltd. (Toshiba JSW) in Chennai for production of steam turbines and generators. In 2014, this facility was transformed into a new establishment under the name of TJPS by integrating Toshiba JSW and the thermal power engineering function of Toshiba India Pvt. Ltd. Through collaboration with another group company, TPSC India Pvt. Ltd., Toshiba has set up the framework to get EPC orders in the thermal power system business.

The infrastructure business is also very effective in promoting employment, with construction sites for building large-scale power plants attracting enough workers to form a small town. Through its business initiatives, Toshiba is not only contributing to stabilize the supply of electricity in India, but also increasing employment opportunities.

Toshiba's philosophy for social infrastructure

The most important aspect in building social infrastructure is to build for the long term. Toshiba considers that its mission is to build power infrastructure that maintains high-quality service levels over many decades. On the basis of its experience, Toshiba believes in delivering highly reliable and efficient products that enable customers (power suppliers) to provide high quality power to the people of India; we also reduce the overall lifecycle cost of the plant by lowering maintenance costs.



Committed to the Future, Committed to India

Toshiba has always maintained its policy to supply "high-quality" power generation products around the world, taking in consideration the life cycle costs. By valuing this policy, Toshiba has won the trust of many power producers and distributors, and therefore, have contributed to long-term stable power supply around the world. Toshiba will maintain its firm commitment to contribute superior technology to secure India's stable power supply, as it does for power plants around the world. The power projects in which Toshiba was involved are still working efficiently even after some decades, and are contributing to the lives of local communities.

"Toshiba – **FOR THE NEXT INDIA**" is our brand promise in India, and Toshiba aims to deliver this commitment through our innovative technologies and expertise in key energy systems and solutions.

FOR THE NEXT INDIA