



KONKAN RAILWAY – A FORERUNNER IN ECO-FRIENDLY INITIATIVES

World Environment Day is being celebrated on 5th June every year with a commitment to make this planet a better place to live. Konkan Railway has always been a forerunner in adopting and ensuring eco-friendly initiatives in its working. It is a matter of pride that Konkan Railway is one of the oldest signatories of United Nations Global Compact (UNGC) since October 2001. There are 307 participants from India, out of which 28 Public Sector Undertakings and Konkan Railway has the distinction of becoming its Member since its inception. Konkan Railway follows the Ten Principles of Global Compact in the areas of Human Rights, Labour Standards, Environment Protection and Anti-Corruption. The same has also been reflected in the Vision, Mission and Objective statements of Konkan Railway, which is always striving for environment protection / conservation as well as developing and promoting innovative technologies for the same.



Some of the initiatives of Konkan Railway for environment conservation are - **An unique and innovative Roll-On Roll-Off service**, which transports road trucks on rail wagons, making it possible to move them through the Western Ghats between Kolad and Suratkal. This Service was introduced on 26th January 1999 and has so far transported 5 lac road trucks and saved about 750 lac litres of fuel. Apart from huge savings to the economy of the country, it has also resulted in ameliorating traffic congestion on roads and significantly benefited with pollution free environment of the Konkan Region. This Technology of Konkan Railway is being emulated on Indian Railways also.



Introduction of fuel efficient and environment friendly DEMU (Diesel Electric Multiple Unit) services is another step in this direction. One of the many benefits these trains provide is reduction of traffic congestion in busy and fast-growing cities like Madgaon. We plan to introduce more DEMU rakes for our passengers trains in the near future.

Konkan Railway has also developed an indigenous low cost robust "Automatic Coach Washing Plant" technology for the cleaning of train coaches. This technology utilizes 70% less water than its manual cleaning counterpart, with over than 10 million liters of water saved at each plant annually. The effluent treatment plant attached to this facilitates the recycling of the consumed water. Konkan Railway has two such plants on its route and one plant has been installed at Kolkata Metro. Considering the huge benefits in terms of



economy as well as the water and energy being saved, this technology is being promoted for use in the Indian Railways as well.

Rain Water Harvesting at five stations viz. Kamathe, Ratnagiri, Ukshi, Ankola and Murdeshwar is another effort to conserve water, which is being adopted by Konkan Railway. All new buildings and installations on KR Route will be provided with rain water harvesting systems in the future.

The provision of Environment eco-friendly bio toilets at both stations and on trains is another novel attempt to conserve resources by harnessing renewable energy. We have so far installed bio toilets in one fourth of our coaches and at eleven of our railway stations. Bio toilets will be installed at all upcoming restrooms at Konkan Railway stations.



In addition "**Organic Waste Convertors**" that convert bio degradable waste into compost have been installed at Ratnagiri, Madgaon and Karwar stations. A **Bio Digester** has also been installed at Ratnagiri station's running room, and the bio gas generated is used for cooking in the kitchen. Following the success of this project, more such Organic Waste Convertors and Biodigesters are in pipeline.

Another effort on the energy management front is a **350 Kilowatt capacity Solar Park at Ratnagiri** which caters to the power requirements of the city. Moreover, roof top solar plants have been installed at Kudal, Sawantwadi and Udupi stations. A wind and solar hybrid renewable energy system has also been set up at level crossing (LC) gates and stations.



Unique energy saving LED lights suitable for tunnels have been developed by Konkan Railway and all 66 Konkan tunnels have been provided with these LED lights.

In an attempt to reduce air pollution, "**Tunnel Ventilation Systems**" have been installed in seven long tunnels along the Konkan Railway route. These systems control the quality of the air within these tunnels.

Konkan Railway has also displayed high sense of responsibility and commitment towards the protection of environment by **planting trees** in the Konkan Region, which is an ongoing activity - over 40000 trees were planted last year alone.

As we move into the future, Konkan Railway shall always continue to focus on positively impacting our environment, not losing sight of our mission to make headway for a better Konkan Railway, a better India, and a better planet.

On this World Environment Day, Konkan Railway vows to redouble its efforts towards Environment Management and Sustainable Development to become a Role Model of responsible Corporate Citizenship.