



Environmental Report 2005

Toyota Kirloskar Motors Pvt. Ltd.



EXECUTIVE MESSAGE

I am proud to announce second issue of environmental report covering the activities for the year 2004-05. This is a major year in the history of TKM where we have launched 'Innova'. This is our commitment towards providing the best vehicles to the Indian community.

We have been recertified for ISO14001 during June 2004. This year we have included Green belt development in our environmental policy, so that we can actively take up greenery development all around our industry & promote the same among our team members.



From beginning we have been concentrating on improving upon our Environmental performance to achieve better results from year after year. We have prepared our five year plan with guidelines from Toyota Motor Corporation and derived our yearly Objectives & targets from this plan. All our team members are striving hard to achieve these targets through number of Kaizens(improvements).

The major Environmental performance indicators we have selected to improve upon are Water, Energy(All types of fuels & electricity), Waste(Both Hazardous & non Hazardous), Volatile Organic Compounds(VOC) and steel reuse & reduce. We are proud to inform that, we have achieved our best results in the areas of VOC reduction and steel reuse & reduce activities.

Apart from these activities we have implemented chemical management system where we have ensured that the Toyota Banned chemicals are not being used anywhere in our industrial operations & we are about to implement the same at all our suppliers & dealers. We are carrying out training sessions to our suppliers & dealers to share our commitment towards protection of environment & to share our Kaizen activities among them. We are encouraging all our suppliers & dealers to implement EMS. We have received excellent commitment from suppliers & dealers which has resulted in ISO 14001 certification of 75% of our major suppliers & 63% of dealers. We would like to thank our environment friendly suppliers & dealers for this significant co-operation.

The activities mentioned above are detailed in this report along with company's environmental performance for the year 2004. We look forward for your opinions & suggestions to improve our environment & our future reports.

I thank our proud Team Members, suppliers, Dealers & Stake holders for their support.

A handwritten signature in black ink, appearing to read 'A. Toyoshima'. The signature is fluid and cursive, written over a faint grid background.

A. TOYOSHIMA
Managing Director

Company's Vision

To Contribute to Indian Industry & economy through sustainable development of society by providing high-quality and innovative products with services, and strive to develop, establish and promote technologies enabling the environment and economy to co-exist harmoniously.

Scope of the Report

TKM is a joint venture between the Toyota Motor corporation (TMC) and manufacturing site located at BIDADI, with a production capacity of 60,000 vehicles per annum. This report mainly reflects the TKM's operations and activity from calendar year 2001-2004

Toyota Earth Charter

BASIC POLICY

- * Contribution toward a prosperous 21st century by setting a challenge to achieve zero emissions throughout all areas of business activities
- * Pursuit of new technologies to enable the environment and economy to coexist harmoniously.
- * Development of a voluntary improvement plan, based on thorough preventive measures and compliance with laws
- * Working in cooperation with society for environmental preservation.

ACTION GUIDELINES

- * Always being concerned about the environment by promoting business that contribute toward environmental improvement.
- * Business partners are partners in creating a better environment.
- * Active participation in social activities as a member of society
- * Activity information & disclosure, to promote environmental awareness.

TKM Environmental Policy

As a good corporate citizen, Toyota Kirloskar Motor PVT Limited, Bidadi, an automobile manufacturing facility is committed towards protection of the Environment by minimizing our impact on the Environment through pollution prevention, conservation of natural resources and continual improvement.

To support this commitment, it is our policy to:

- Actively promote environmental awareness and knowledge among Team Members through continual education and job specific training.
- Ensure compliance with legal as well as other requirements to which our company subscribes.
- Establish and review environmental objectives and target annually to ensure better environmental performance through proactive continual improvement activities.
- We shall establish programs and conserve energy natural resources, flora, fauna and build a **GREEN ENVIRONMENT**, within and surroundings as a part of our policy.

We recognize the importance of continual improvement in environment performance while creating economic growth and maintaining competitive advantage. We are committed to this philosophy and it is our hope that, you, our Team Members, suppliers, customers, dealers and neighborhood share our commitment in preserving a very valuable resource.....**OUR ENVIRONMENT.**

Environmental Role

- # Legal Compliance (Zero abnormalities and Complaints)
- # Prevention (Pollution & waste minimization)
- # Continuous Improvement in Environmental Performance
- # Maintenance of ISO 14001 Certification.

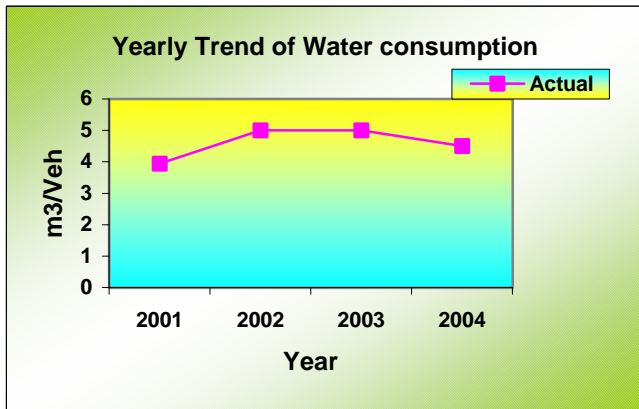
Environmental Action Plan.

TKM is preparing its Five year Environmental action plan to Execute from Year 2006 to 2010 & this plan is being prepared under the guidelines of Toyota Motor Corporation, Japan which has announced its 4th 5 year environmental action plan.

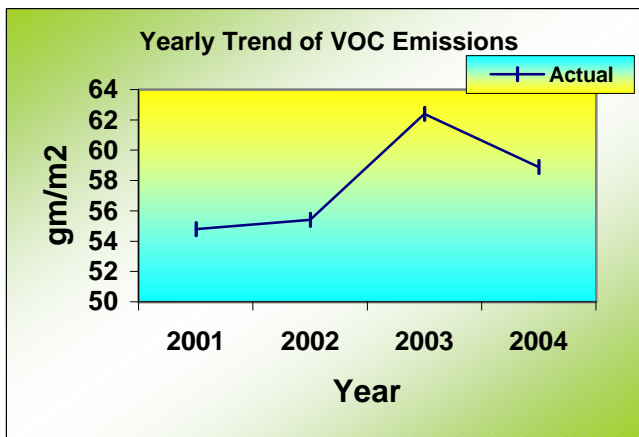
The Fourth Toyota Environmental Acton Plan seeks to achieve a balance between Toyota's growth and harmony with society and to contribute to the development of a sustainable society. The following four main points were incorporated into the plan to achieve these objectives.

- (1) CO2 emissions management Create medium- to long-term scenarios and start management of CO2 emissions volumes on a global scale
- (2) Reinforcement of environmental management by business partners Reinforce environmental management by business partners on a global scale (suppliers & dealers).
- (3) Elimination of substances of concern Eliminate substances of concern (lead, mercury, cadmium, and hexavalent chromium) on a global scale
- (4) Cooperation with society Contribute to the development of a recyclingbased society

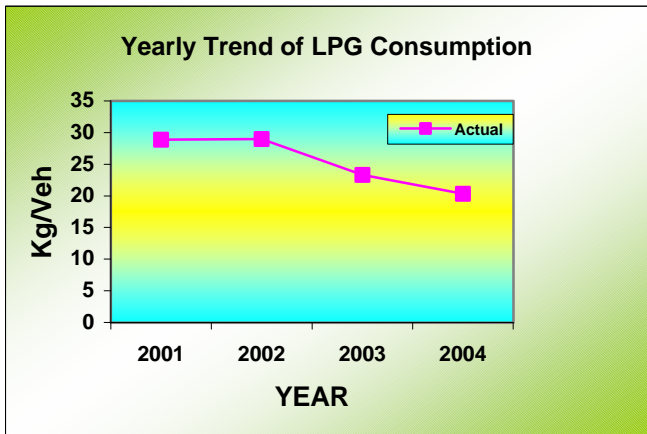
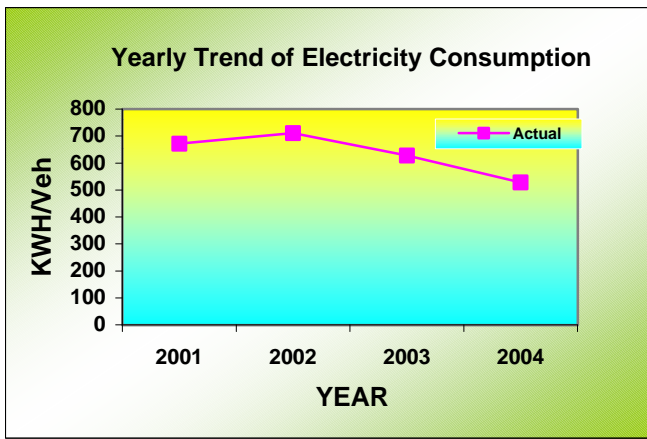
TKML performance for the year 2004



Large quantity of water is being used in processes like washing & other processes in paint shop, Generation of steam, Cooling towers & domestic activities. TKML is pursuing various activities to reduce water usage by reviewing the various operation in an industry. Water consumption per unit production trend is continuously decreasing from year 2002 as outlined in the graph. Also, the company is been continuously setting up a target by highlighting 3-R activity (Reduce, Reuse, Recycle) in order to conserve water resource.



Volatile Organic Compounds (VOCs) is one of the substance of concern whose major source being raw materials used by an industry. Organic thinners used in automobile painting processes account for the majority of VOCs generated. TKML had set challengeable target for the reduction of VOC emissions. After the introduction of International Multi-purpose Vehicles (IMV) project, there has been several changes in the plant. However, there was considerable reduction in VOCs emissions from the paint shop. This was mainly due to the dilutio ratio reduction, reduction in washing thinner consumption, increase in thinner recovery ratio, and continuous implementation of Kaizens. The VOC emissions are decreasing from the Year 2003 onwards.



Energy is a basic element for any activity of business operation. Also, consumption of energy leads to environmental impacts such as global warming and degradation of natural resources. Hence, TKML has committed itself for the effective and efficient use of energy and thus reducing the adverse effects on the environment by setting Challengeable target. It can be observed from yearly trend of energy consumption (LPG & Electricity) per unit produced as there is continuous reduction in the consumption of LPG & Electricity. The LPG consumption has reduced by 33% in 2004 with respect to 2001 and also an electricity consumption has continuous decrease trend. However, continuous monitoring and analyses are carried out in order to reduce nonproductive usage of energy consumption.

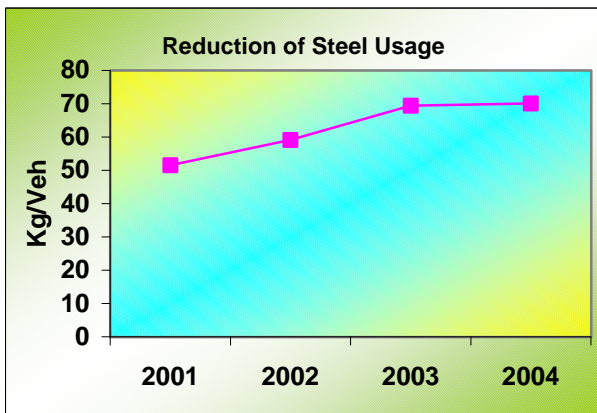
Energy consumption is showing a decreasing trend continuously from the year 2002 onwards.

Chemical Substances Management

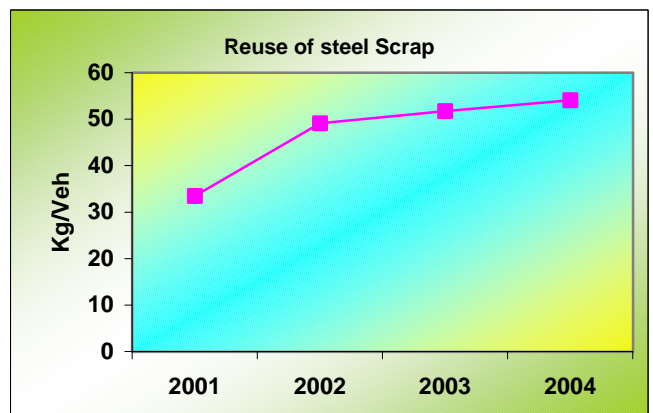
Different chemicals substances have been used for the operation of painting and die-casting processes. TKM has framed chemical control procedure for definite control over the used chemicals and to ensure that TMC banned chemicals will not be used in our plant.

Yield ratio

TKM is still continuing as No.1 in steel yield ratio among all global Toyota affiliates. Scrap parts are being utilized to produce smaller components. The yearly trend of Reuse of steel scrap and Reduction of Steel usage outlines good yield ratio of 74%.



Better Performance ↑



Waste water treatment & Recycle

Treatment

TKM has an efficient wastewater treatment plant, which effectively treats both the industrial & domestic wastewater. The wastewater is treated by the series of physical, chemical and biological treatment process, to meet a level upto internal regulatory standards which are more stringer than KSPCB regulations.

Analysis

Analysis of waste water is being carried out in the in-house laboratory regularly. Treated effluent is being used for fish pond to ensure the treatment efficiency.

Recycling

Treated waste water is being used for Gardening purposes & Toilet flushing.



Waste water treatment plant

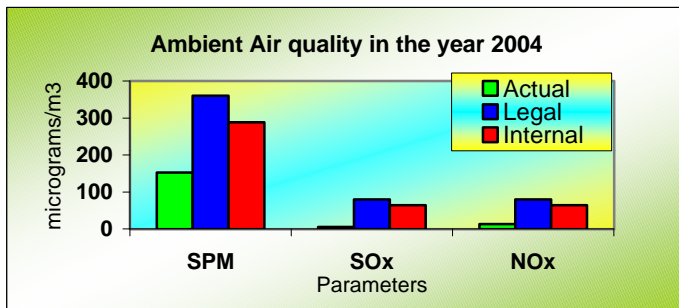
Fish pond for Bio assay test



Waste water Treatment plant laboratory.

Waste water treatment					
(Conforming to The Water (Prevention and Control of Pollution) Act)					
Parameter	Standards		Actual Measurement		
	Internal	Legal	Maximum	Minimum	Average
pH	5.8-8.6	6.5-8.5	7.2	6.1	6.4
COD	200	250	34	16	21
BOD	25	30	10.4	3	6.72
SS	80	100	5	2.5	3.36
Oil & Grease	7	10	0	0	0
Heavy Metals like Lead, Arsenic are negligible and undetectable					
All figures are shown in mg/l, except for pH.					

Air quality Monitoring



Air emissions from all the sources are monitored regularly & the trend of air emissions is given the Chart above. Ambient air quality monitoring & Noise monitoring are carried out to ensure the legal compliances.

ISO 14001 EMS

Objectives & Targets for the year 2004

Objectives		Targets
Reduction in Energy consumption		
	Electricity	553 kwh/veh
	LPG	25.8 kgs/veh
Reduction in Water consumption		4.3 m3/veh
VOC reduction		58 gm/m2
Reduction in Hazardous & NonHazardous waste		20% Based on 2002 levels
Implementation of Chemical management at Suppliers & dealers certified for ISO 14001		Suppliers & dealers certified for ISO 14001

Waste Management system

Non Hazardous waste :

Waste is being categorized into following categories - Paper, Plastic, Wood, Cotton, Steel, Metal dust & Glass.

Waste disposal procedure-Key Points

Waste is segregated at the source.

Waste is quantified at various levels i.e., ISO dollywise, Line wise, Shop wise & company wide.

Based on quantity of waste generated in the previous year, target are fixed for reduction & reuse activities.

Returnable packing is introduced for eliminating carton boxes.

Hazardous Waste

Hazardous waste generated in TKM are Paint Sludge, Phosphate sludge, Chemical sludge, Waste contaminated with Oil/chemical & Empty containers.

Paint sludge is Incinerated by KSPCB & CPCB authorised contractors.

Phosphate sludge, Chemical sludge & Incinerated ash are filled in MS drums, labelled & stored at TKML hazardous waste storage area.

Waste oil is sent for reprocessing at KSPCB & CPCB authorized contractors.

Empty chemical containers are disposed through KSPCB & CPCB authorized contractors.



Waste segregation at source



Hazardous waste are filled in MS drums, labeled & stored at Hazardous waste storage Yard.

ISO 14001 Certification of suppliers & dealers

As a good corporate citizen TKML is encouraging its Major Suppliers & all its dealers to get certified for ISO 14001. We are organizing training programmes in this regard, also we are sharing our kaizens with the suppliers & dealers.

Environmental Roles & Responsibility for suppliers

To Create an Awareness about Environment

To provide guidelines regarding EMS & its application

ISO 14001 certification of all dealers and major suppliers.

Phase out of Banned substances

Encourage development of comprehensive chemical management system.

To develop alternatives to phase out the chemicals banned by TMC.

Identifying and Organising the regular training program on EMS.

TKM views on the principles of independence and responsibility, that emphasizes local capital, and has made every effort to fulfill its responsibilities in a system of mutual trust. It believes that it is important to achieve the greatest overall effect by respecting the independence of its dealers and enabling them to realize their strengths towards Environmental Performance. TKM seeks to contribute to society by providing customers with the most attractive products in the most timely manner. To do this efficiently, purchasing needs to build the world's No.1 supply base. This is achieved by deepening ties with suppliers who share the commitment for creating high-quality & Environmental friendly products for customers.

Training was imparted to all major suppliers and dealers in order to boost up the dealers across the country to obtain ISO 14001 certification to show them the significance and potential of environmental management. TKMs future Environmental Performance is highly contingent on the innovation of our suppliers and dealers. Specific process related kaizens were also shared to increase supplier & dealer side environmental management system efficiency. Its been constant endeavour of TKM to march forward in environmental performance along with suppliers and dealers. TKM always encourages the concept of continual improvement to be adopted by all its suppliers and dealers in relevant forms & enhance their environmental performance.

ISO 14001 Certification status of suppliers

No. of Suppliers certified for : 66

No. of suppliers registered for : 17



ISO 14001 & Environment Training for suppliers

ISO 14001 Certification status of Dealers

Total No. of dealers : 49

No. of dealers certified : 31

No. of Dealers registered for Certification : 9

New dealers : 9



ISO 14001 & Environment Training for Dealers

Community Development Programmes

As part of TKMs commitment towards local community development following works are taken up

1. Training to the local community on:

- *Basic Environmental awareness
- *Emergency Preparedness
- *TKM good practices
- *Health & Hygiene



Environmental Training to local community

2. Competitions for school children on Environment

- * Painting competitions on environment
- * Contribution of Environmental friendly furnitures on 'Earth Day' to the Local Pre-nursery schools



Painting Competition for School children

DMD Mr.Seki evaluating the paintings Made by School children

TKM MD Mr.Toyoshima and DMD Mr.K.K.Swamy with the children Of the Pre-Nursery school

3. Participation in the Government organized exhibitions to communicate TKM best practices



Explanation of TKM Best Practices at exhibition

TKM stall at the exhibition

Product Design & development

INNOVA



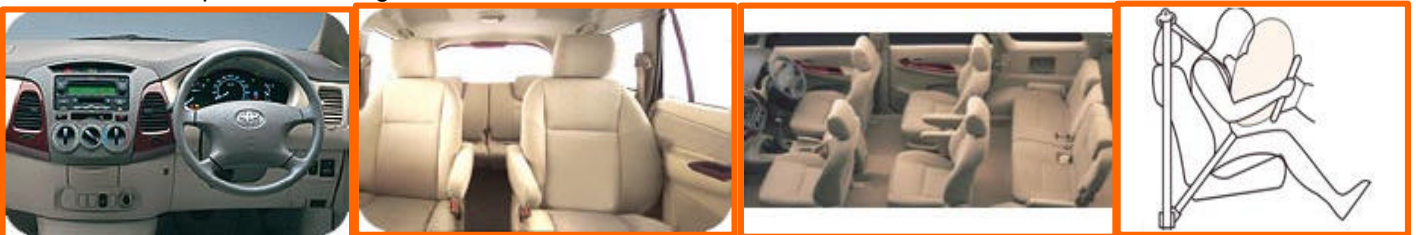
A modern and dynamic design, marked by Toyota's experience in knowing the roads of the world, provides stylish exterior features, remarkable comfort and around safety with a promise of global product quality. Advances in engine technology come alive with D-4D Common Rail Diesel Turbo engine and the variable Valve Timing-intelligent Gasoline engine, giving boosted fuel efficiency, power and performance.

The all-new Toyota Innova is designed with comfort and dynamism in sight. In engineering, a family multi-purpose vehicle(MPV) that's designed for the future. Each angle, each section, each component of the Innova is pleasurable to the senses in all its features. Its aerodynamic configuration presents a slanted windshield and flowing lines form a sporty waved, mono-form design. Streamlined side curves project continuity as its round rear image and trapezoidal front give a stable look and form. In addition, generous touch of class with chrome accents and a commanding front grille enhancing this magnificent art-of-work.

The Innova gives you the choice between two powerful engines-both engineered for optimum driving performance. Innova's smooth lines gives it superior aerodynamics for better performance and mileage. the rear suspension has both of ride comfort and durability and is specifically tuned to the roads of India. large wheels create a modern and powerful stance while the wide trend makes for balanced look and contributes to straight line stability. Innova is easy to drive on narrow roads.

The Active Safety prevents accidents from happening while the Passive safety minimizes injury to passengers and damage to vehicle in case of accidents. The Innova GL comes with Supplementary Restraint System(SRS) airbag for driver and passenger for the prevention of fatal injury during accident.

Innova has splendid, ergonomically-designed comforts, the Innova's cabin is wide by design to accommodate your passengers and their things with total ease. It gently surrounds the driver and passengers to give a feeling of total comfort and unique sense of togetherness.



Innova

Contact Details

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