



TKM Environment Management System was confirmed to meet all the requirement of ISO 14001:2004 version, by AJA (Anglo-Japanese American), our external certifying agency and certified with ISO 14001 certificate on July 2006 ( Fig.2).

Fig 2: ISO 14001: 2004 Certificate

## 1.2 Internal Auditors Training

An Internal Auditor training was imparted by the AJA (Anglo-Japanese American) Auditor to the core-group of Environment Management System (fig 3). The training was focused to develop the skill of internal auditors to check the effectiveness of system implementation & to identify improvement areas.

Fig 3: TKM Environment Core-Group



## 2. ENVIRONMENT ACTION PLAN

### 2.1 An Overview:

The Toyota Environment Action 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 Environmental Action Plan is a clear guideline of the activities that TKM must undertake in order to realize the corporate image.

In adopting the plan, Toyota Kirloskar Motors has addressed five main environmental areas:

1. Global Warming
2. Recycling of resources
3. Chemical Management - Substances of Concern
4. Atmospheric Quality.
5. Co-operation with Society

#### (1) CO<sub>2</sub> emissions management

With a clear sight of CO<sub>2</sub> emission reduction, TKM has developed its medium- to long-term plan for achieving CO<sub>2</sub> emission reduction.



A Plan is made for reduction of electricity consumption, reduction in fuel consumption & reduction of emission from logistic activities by promoting /sharing the best practices of Affiliate Company.

## (2) Recycling of Resources:

Natural resources are to be carefully used & preserved for the future generations. These resources are free, but it has to be used judiciously as they are bound to be exhaustible. Due care and caution in use of natural resources is necessary. Conservation of natural resources is a key factor for sustainable development. By realizing this, TKM has made action plan for achieving reduction of water consumption and Waste generation. In order to achieve this, various activities through 5R (Reduce, Reuse, Refine, Retrieve Energy, Recycle) are planned.

## (3) Chemical Management & Elimination of Substances of Concern:

TKM extends its commitment through elimination of usage of hazardous chemicals. TKM has prepared its consolidated list of banned chemicals by Indian law and TMC. All the raw materials and chemicals used at TKM are continuously monitored to ensure that they don't contain any banned chemicals.

Realizing towards the recycle based society TKM has started phase out activity for 4 substance of concern (Lead, Hexavalent Chromium, Mercury, and Cadmium) from all the vehicular parts/component which are directly or indirectly impregnated on Toyota Built Vehicle.

## (4) Atmospheric Quality

Air is the life supporting important element of natural environment, sometimes becomes our bitter enemy, as and when it gets polluted, attempts are then made to reduce the emission of pollutants from the automobiles or factory by adopting mechanical means or adopting high rise chimneys for better dispersion. Thus, TKM has planned for engineered mechanisms for exhaust gas emissions through process enhancement. TKM, has also extended its commitment towards continual minimization of the emission of volatile organic compound during painting process and thus, reducing the harmful effects over an ambient environment.

## (5) Co operation with society

TKM share its best practices and extends its commitment by publishing the Environmental Report and contribute to the development of a recycling based society. Also, organizing Environmental Awareness program at schools & Colleges, students visits to company facility to visualize the best practices.



## 2.2 Highlights - TKM's Five Year Environment Action Plan (FY 2006 ~ FY 2011)

Toyota Kirloskar Motors has prepared Five Year Environmental Action Plan (Table 1) based on the guidelines from the Toyota Motor Corporation.

Table 1:

Policy	Action Item	Area	Specific action items & Goals
CO2 Emission Reduction	Reduce CO2 emissions in production & logistics activities of each country & region.	Production	* Reduction in electricity consumption. (Purchased+generated)(kwh/veh) 20% based on Current year status
			* Reduction in LPG consumption. (kgs/veh) 20% based on Current year status
		Logistics	* Reduction in emission of CO2/unit 15% reduction based on 2006 values
Resource conservation	Promote the effective use of resources to further contribute to the realization of a recycling based society	Production	<b>Increase Yield ratio :</b> To reduce steel consumption by reuse & reduce activities.
			<b>Waste reduction :</b> Reduction in generation of Hazardous waste (kgs/veh). 20% based on Current year status. (Chemical sludge+Phosphate sludge+Paint sludge) Reduction in generation of Non Hazardous waste (Miscellaneous solid waste) by 20% based on Current year
		Logistic	* Reduction of packaging & wrapping materials
		Production & Domestic consumption.	* Reduction of water consumption by 10% based on current year status (m3/veh)
Substances of concern	Promote Management & further reductions in the use of Substances of Concern	Production	* Eliminate use of four SOCs (Lead, Mercury, Cadmium & Hexavalent Chromium)
Atmosphereic quality	Initiative activities to reduce air emissions.	Production	* Reduction of Volatile Organic compounds.
Co-operation with society	Improve disclosure of environmental information & two way communications.	Society	* Enhance the content of environmental reports * Enhance communication with local



3. ENVIRONMENT PERFORMANCE

The company is well aware and respects its obligations to the society and is committed to ensure a pollution free and healthy environment to its employees and the community at large. All TKM business decisions are integrated with environmental dimensions not only since inception but also during the continuous expansion phases.

A numerous variety of materials including metals such as steel, aluminum, as well as glass, rubber and chemical substances are used in automobile manufacturing processes, while energy such as electricity, natural gas, heavy oil and water are consumed as, natural resource being essential for any manufacturing industry.

Training of our team members is a key to achieve Environment performance that we strive-for. New team member's are trained for basic environmental awareness and with highlights of ISO 14001 and its requirement. The team members working in the environment significant areas are trained with respective significant aspects and the steps to be taken during environmental emergency. The team members are imparted On the Job training for conservation of natural resources and Waste reduction activity by Environment Group.

Table 2 : Summary of Key Environmental Performance Index

Policy	Objectives & Targets for Year 2005	Activity Results	Objectives & Targets for Year 2006
Training & Awareness	*To modify TKMs training methodology in line with TMC and impart training to achieve level three	*Revision of the TKM Training methodology to incorporate feedback & reflection system(OJT) Completed	To achieve level 4 to 50% of TL & GL on OCPs
			Train all members on waste management to achive 100% Waste Segregation
	*Internal Auditors Retraining (Target 20 nos with 90% efficiency)	*Internal Auditors(26 N0s) Training was given imparted by an External Agency	To develop alternate core members & internal auditors for all divisions
			*Core member Retraining (Target 15 nos with 80% efficiency)
Legal Compliance & TMC requirements	Ensuring of 100% Legal Compliance & Zero complaints & TMC Requirements	Comply with all applicable legal and other requirement during the FY2005	Ensuring of 100% Legal Compliance & Zero complaints & TMC Requirements
Chemical Management	*Implementation of chemical management system at Suppliers & Dealers(who are ISO 14001certified) *Continuously monitor new Chemicals to ensure the non-presence of TMC Banned chemicals	*Training Suppliers & Dealers on TMC banned Chemical list was carried out. *Contiuously checking the MSDS of new chemicals at TKM	* Implementation of chemical management system at Suppliers & Dealers(who are ISO 14001certified) * Continuously monitor new Chemicals to ensure the non-presence of TMC Banned chemicals. * Elimination of SOCs in all local parts of Innova & Corolla by Dec 2006