

A large, stylized green leaf graphic is positioned diagonally across the right side of the page, partially overlapping the title and the car image.

## ENVIRONMENT & SOCIAL REPORT 2008

### BUILDING THE ECO-FACTORY

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**TOYOTA KIRLOSKAR MOTOR PVT. LTD**

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WE RECOGNIZE THE NEED TO BALANCE ECONOMIC GROWTH WITH THE **NEEDS OF SOCIETY** AND THE **ENVIRONMENT**. THIS VIEW IS EMBODIED IN OUR MANAGEMENT PHILOSOPHY, **THE TOYOTA WAY**, WHICH GUIDES OUR ACTIONS IN DESIGNING, BUILDING AND DISTRIBUTING OUR PRODUCTS AND SERVICES. FROM WASTE REDUCTION TO **RECYCLING** TO RESOURCE MANAGEMENT AND PRODUCING **CLEANER**, MORE **EFFICIENT** TECHNOLOGIES, WE ARE STRIVING TO REDUCE THE ENVIRONMENTAL IMPACT OF OUR **PRODUCTS** AND **OPERATIONS**.

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AS A DIVERSIFIED, MULTINATIONAL  
**CORPORATE LEADER,**  
TOYOTA HAS ESTABLISHED A  
COMMON SET OF  
**VALUES, BELIEFS, PRINCIPLES**  
AND BUSINESS METHODS THAT ACT AS  
THE LIFELINE OF THE COMPANY.



## Introduction

Toyota, which started with a humble power loom in 19th Century, is one of the most respected companies in the automotive sector today. With its emergence as a diversified, multinational corporate leader, Toyota has established a common set of values, beliefs, principles and business methods that act as the lifeline of the company. Collectively, they are known as the "The Toyota Way". Riding on the stupendous growth stories in North America and Europe, Toyota drove into the Indian market towards the end of last century, and as the saying goes, the rest is history.

Kirloskar Group which has carved a name for itself in the history of Indian Industry, the group's core philosophy of developing indigenous technology and industry was one of the key drivers for the alliance between Kirloskar Group and Toyota Motor Corporation (TMC). The joint venture led to Toyota Kirloskar Motor Private Limited (TKM) in India on October 1997.

Adopting the "Growing Together" philosophy of its parent company (TMC) TKM has established a unique and long-term business growth partnership along with its dedicated dealers and suppliers to not only create employment opportunities but also innovated itself in the Indian automotive industry. TKM is located at Bidadi Industrial Estate, about 30 kilometers from the city of Bangalore.



OUR **ACTIONS** TODAY WILL HAVE  
DIRECT AND INDIRECT  
**CONSEQUENCES** ON POSTERITY  
FOR YEARS TO COME.  
**SUSTAINABILITY** FORMS THE  
FOUNDATION FOR ALL OUR BUSINESS  
ENDEAVORS.

## Scope of Report

We understand the concept of sustainable development and are aware of the fact that our actions today will have direct and indirect consequences on posterity for years to come. Sustainability forms the foundation for all our business endeavors and we try to achieve a balance between our economic, environmental and social performances.

This report includes information on our automobile businesses. The information presented in the report is for the period from April 2007 to March 2008 and have presented relevant case studies to bring in unique features of our unit. We have attempted to highlight the environmental concerns and social issues faced and our approach towards them.

Environmental performance at TKM has been elaborated by presenting data on energy and water consumption, air emissions and waste generation. We have also given a brief account of safety and training under this section. On the social sphere, we have included indicators such as work force diversity, employment generation, and community initiatives. A brief account of our Corporate Social Responsibility is outlined in the report along with various social initiatives.

WE WILL INVEST MILLIONS OF  
DOLLARS AND SUBSTANTIAL  
**TECHNICAL RESOURCES**  
IN DEVELOPING AN **ECO FACTORY**  
- A MANUFACTURING PLANT THAT WILL COEXIST IN  
**HARMONY** WITH THE ENVIRONMENT.

## Message from the MD



The year 2007 saw Toyota crossing two milestones in its history. While globally 2007 marked Toyota's seventieth anniversary, TKM in India completed ten years of operation.

We believe that vision towards environment protection & development forms the mantle of the business practices of our organization. With the automobile market becoming more and more competitive and vast as days are progressing, maintaining the fine balance between the cycles of industry and environment is a big challenge. In this scenario, we are

committed to leading not only from a business point of view but also from environment point as well.

Technology we believe is not in terms of the product we deliver but also manufacturing process has a huge potential to make a difference. An automobile industry is resource intensive industry that consumes large quantities of steel, power water & oil, a reduction in the consumption will not only help in environment preservation but also for the sustainability of the industry.

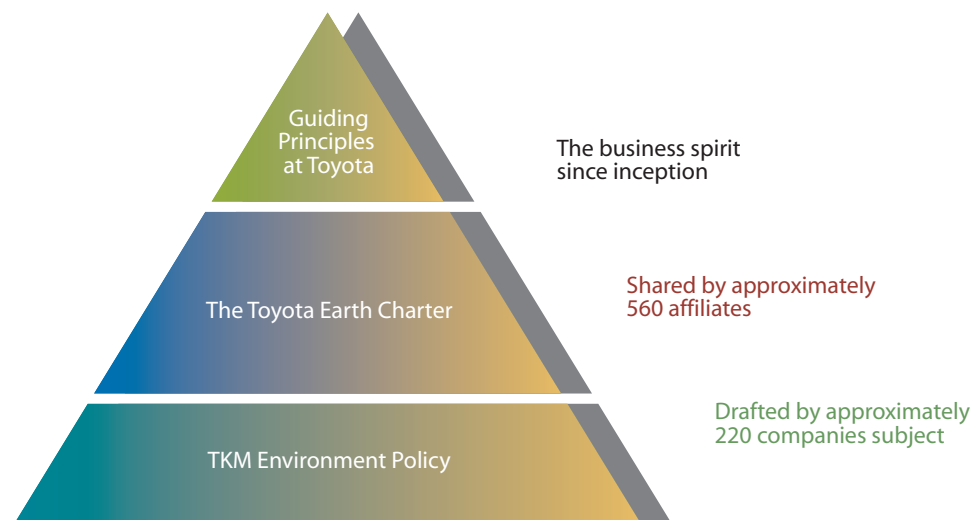
We have officially announced the start of the new plant where we are planning to invest millions of dollars and substantial technical resources in developing a facility which we would like to call as an ECO FACTORY. Our aim is to create a manufacturing plant that would coexist in harmony with the environment.

We would like to utilize this opportunity to thank our suppliers & dealers for your efforts to save our environment. I would request suppliers, dealers and all our stakeholders to intensify the magnitude of the environment activities at your respective areas as the journey towards establishment of a sustainable eco factory has only begun. Let's all join hands together towards creating a green environment & a happy community by improving lives of millions of people.

*H. Nakagawa*

Hiroshi Nakagawa

# Guiding Principles at Toyota



Since its foundation, Toyota has strived to contribute to the sustainable development of the society & environment. TMC and its subsidiaries believe that this can be achieved by manufacturing and delivering high-quality products accompanied by innovation and quality services.

Evolving from such continuous efforts Toyota has constituted its own management philosophy, values and methods that have been passed down from generation to generation throughout the

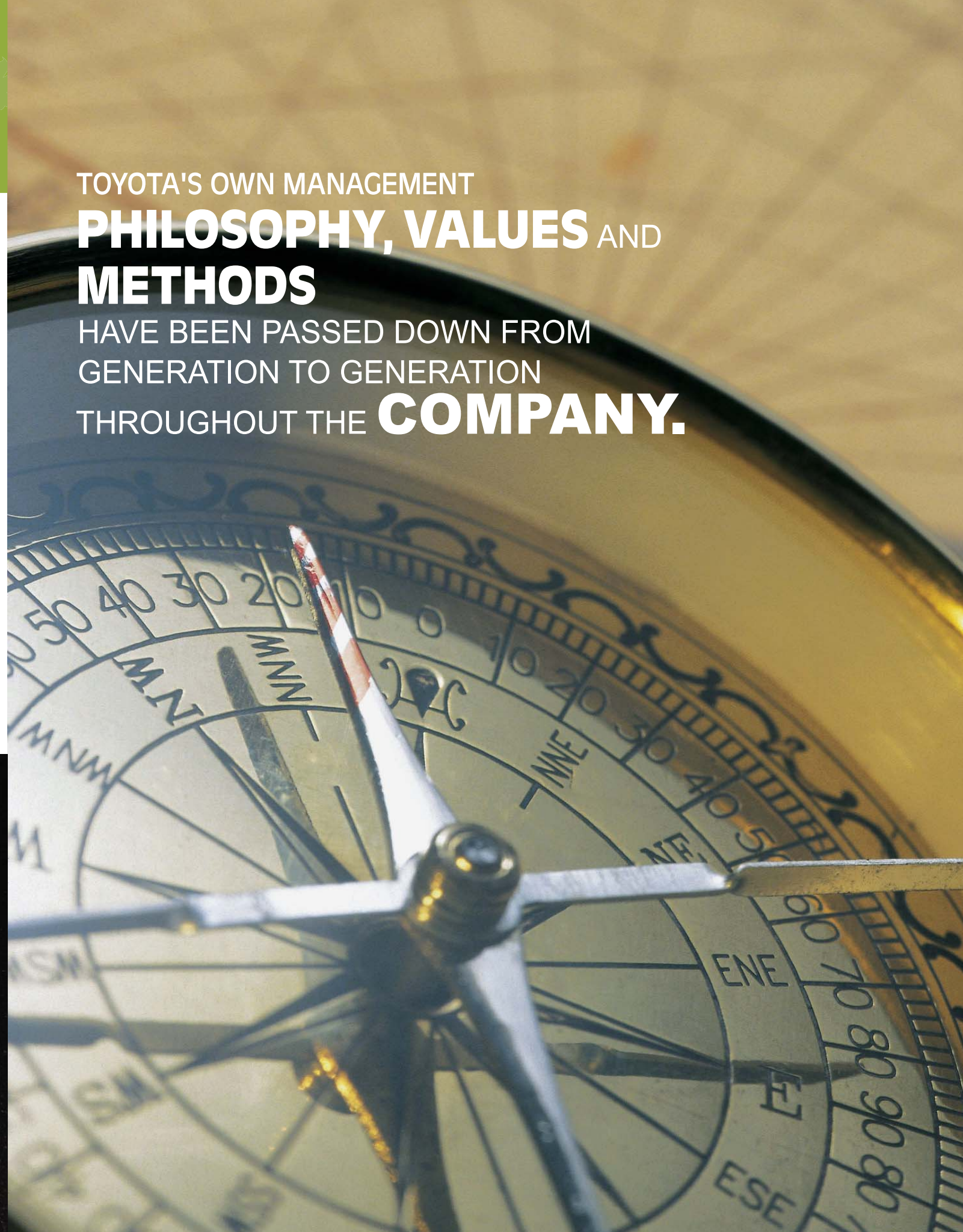
company. Toyota has summarized this management philosophy into what is known as the "Guiding Principles at Toyota" (originally issued in 1992, revised in 1997) which reflects Toyota's commitment to the society. The Guiding Principles at Toyota were created in the expectation that all Toyota Group companies and business partners would understand and share fundamental management principles and contribute to society by referring to these principles.

## Guiding Principles at Toyota

- Honor the language and spirit of the law of every nation and undertake open and fair corporate activities to be good corporate citizen of the world
- Respect the culture and customs of every nation and contribute to economic and social development through corporate activities in the communities
- Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all our activities
- Create and develop advanced technologies and provide outstanding products and services that fulfill the needs of customers worldwide
- Foster a corporate culture that enhances individual creativity and teamwork value, while honoring mutual trust and respect between labor and management
- Pursue growth in harmony with the global community through innovative management
- Work with business partners in research and creation to achieve stable, long-term growth and mutual benefits, while keeping ourselves open to new partnerships



TOYOTA'S OWN MANAGEMENT  
**PHILOSOPHY, VALUES AND METHODS**  
HAVE BEEN PASSED DOWN FROM  
GENERATION TO GENERATION  
THROUGHOUT THE **COMPANY.**



Basic Policy

1. Contribution toward a prosperous 21st century society

In order to contribute toward a prosperous 21st century society, aim for growth that is in harmony with the environment, and challenge achievement of zero emissions throughout all areas of business activities.

2. Pursuit of environmental technologies

Pursue all possible environmental technologies, developing and establishing new technologies to enable the environment and economy to coexist harmoniously.

3. Voluntary actions

Develop a voluntary improvement plan, not only based on thorough preventive measures and compliance to laws, but that address environmental issues on the global, national, and regional scales, and promotes continuous implementation.

4. Working in cooperation with society

Build close and cooperative relationships with a wide spectrum of individuals and organizations involved in environmental preservation including governments, local municipalities, as well as with related companies and industries.

Action Guidelines

1. Always be concerned about the environment

Challenge achieving zero emissions at all stages, i.e., production, utilization, and disposal.

Develop and provide products with top-level environmental performance

Pursuit of production activities that do not generate waste

Implement thorough preventive measures

Promote businesses that contribute toward environmental improvement

2. Business partners are partners in creating a better environment

Cooperating with associated companies.

3. As a member of society

Actively participate in social actions.

Participate in creation or cyclic society

Support environmental government policies

Contribute also to non profit activities

4. Toward better understanding

Actively disclose information and promote environmental awareness

As a good corporate citizen, Toyota Kirloskar Motor PVT Limited, Bidadi, an Automobile Manufacturing Facility, Sales of Automobile and Automobile Parts 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.



TKM Vision & Mission

Vision

Delight our customers through innovative products, buy utilizing advanced technologies and services.

Ensure growth to become a major player in the Indian auto industry and contribute to the Indian economy by involving all stakeholders.

Become the most admired and respected company in India by following the Toyota Way.

Be a core company in global Toyota operations.

Mission

Practice ethics and transparency in all our business operations.

Touch the heart of our customers by providing products and services of superior quality at a competitive price.

Cultivate a lean and flexible business model throughout the value chain by continuous improvement.

Lead the Toyota global operations for the emerging mass market.

Create a challenging workplace which promotes sense of pride, ownership, mutual trust and teamwork.

Create an eco-friendly company in harmony with nature and society.

# TOYOTA IMPACT»»»

**Clean renewable energy is a priority for TKM. Making the world a better place to live and work in is always at the top of the agenda.**

## Renewable Energy

Green energy is sustainable energy form of renewable sources. As a corporate social responsibility, it will be always required to promote the sustainable energy for the betterment of social & environment. In this view, TKM will be installing wind turbine to offset the impact of CO2 emission caused due to manufacturing activity. Also, Solar panels will be utilized as a source of energy for Administrative Blocks. Feasibility study will be done to utilize the bio-fuels for heating equipments in the form of cleaner fuels.



CLEAN  
POWER

# Corporate Governance

Good governance is the backbone for a smooth functioning of any organization and we at TKM are driven by our ethics and values with a vision to be the most admired brand. Ethics are critical for building a good organization, for decision making, enhancing our work culture and helping us aligning with our Vision and Mission. We have developed our code of ethics and categorized it into 'Basic Code' and the code of ethics covering their 'Specific Areas'. Collectively they will guide the actions of the team members in their day to day activities.

## 1. Basic Code

- To comply with domestic and international laws;
- Be aware of local customs, social rules, tradition;
- To maintain integrity

## 2. Specific Code

- Team work & good working environment
- Contribute to Company
- Safety and Health
- Comply with working regulations
- Human Resource Development
- Protecting Environment
- Customer Satisfaction / Marketing Activity
- Develop Technology & Engineering
- Protect Company's Assets/ Tangible & Intangible
- In relation with Suppliers, Dealers, Financial Institutions, Service Providers
- In relation with Government
- In relation with Shareholders & Stakeholders

## TKM's Board of Directors

Name	Designation
Mr. R. Sasaki	Chairman
Mr. V. S. Kirloskar	Vice Chairman
Mr. Hiroshi Nakagawa	Managing Director
Mr. S. Tomonaga	Deputy Managing Director
Mr. M. Kawabata	Deputy Managing Director
Mr. H. Koyama	Director
Mr. H. Nakamura	Director
Mr. M. Ono	Director
Mr. K. Takarada	Director
Mr. T. Ijichi	Director
Mr. A. C. Kirloskar	Director

## TKM's committees

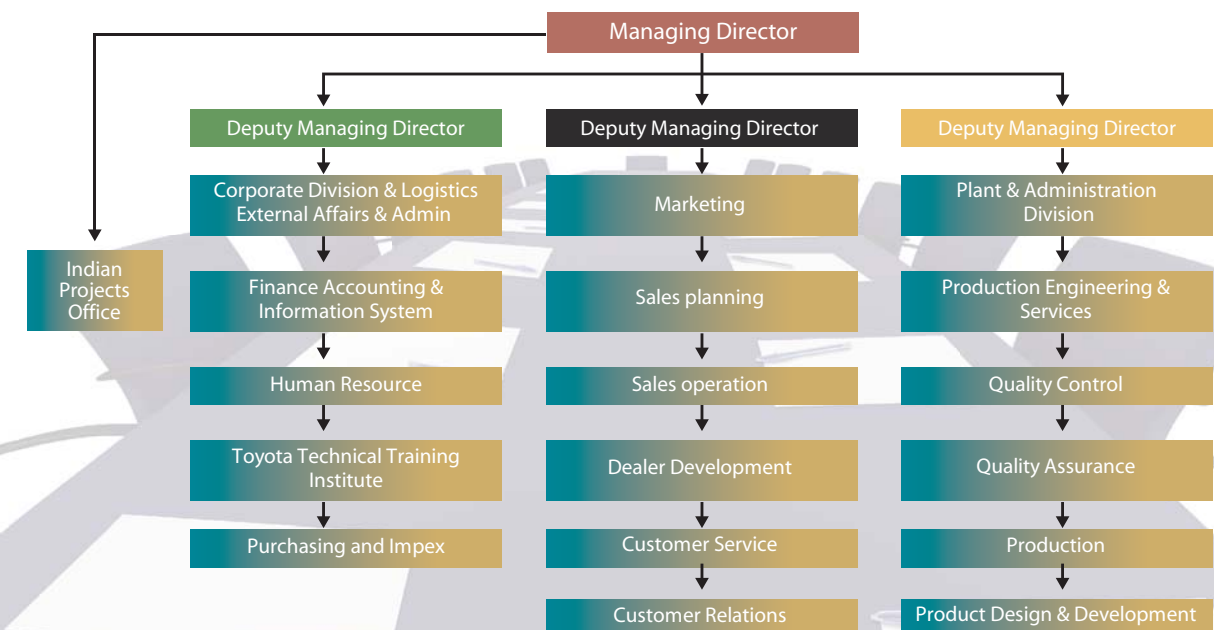
### Audit Committee:

Mr. R. Sasaki  
Mr. V. S. Kirloskar  
Mr. Hiroshi Nagakawa

### Remuneration Committee:

Mr. R. Sasaki  
Mr. K. Takarada  
Mr. T. Ijichi

## TKM's Hierarchy



## TKM's industry affiliations

- Federation of Indian Chambers of Commerce and Industry
- Indo Japan Chamber of Commerce & Industries
- Society of Indian Automobile Manufacturers
- Automotive Research Association of India
- Confederation of Indian Industry
- Bangalore Chamber of Industry and Commerce
- The Energy and Resource Institute
- Engineering Export Promotion Council.



# TOYOTA IMPACT»»»

TTTI admits 32 students every year from surrounding villages. The youth are taught skills that will make them employable for the rest of their lives.



FUTURE  
PERFECT



Toyota Technical Training Institute

The Toyota Technical Training Institute (TTTI) is a unique contribution of TKM to the society. When the idea of social contribution germinated at TKM, a survey was conducted in 2005 in the neighbouring villages to assess the needs of the local people. Most of the responses were the same - employment; while a few responses mentioned the need for better roads and other civic amenities, it was clear that a majority of the respondents were seeking employment. Toyota, however, reckoned that instead of feeding people with employment, it would rather equip them with skills that will make them employable anywhere. Thus, TTTI was founded with Toyota's philosophy of "respect for people". In fact, TKM is the only automotive company in India to establish such an institute. The idea of TTTI was to inculcate holistic education to students who did not have the financial means to pursue their higher studies after class 10.

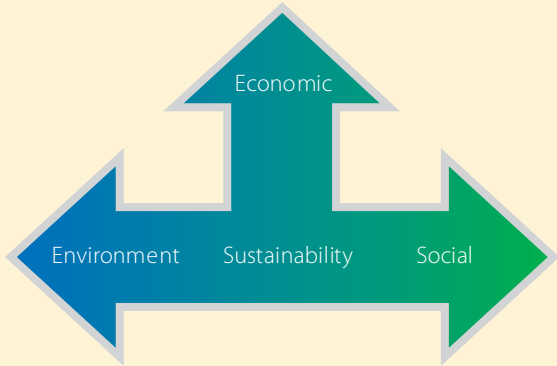
TTTI was founded in August 2007 to develop human resources utilizing the discipline of Toyota and create learning opportunities for skilled individuals. Right from the day of admission, TTTI offers a unique and creative environment to the students. They are encouraged to plant a sapling a day after their admission, which is nurtured every day until the students complete their three-year programme. There are four main automobile related 'trades' that are offered to the students, viz., automobile assembly, automobile paint, automobile weld and mechatronics. All students are initially trained in all the four trades, and based on their aptitude, specialize in a trade. They also undergo practical training at the TKM plant to apply their theoretical knowledge. This apart, the students are also inculcated with waste segregation, good health and physical fitness, respect for the environment and other life skills that would transform them into socially responsible citizens.

The students of TTTI, while on their holidays, impart the lessons learnt and best practices to their parents and other friends in their villages. In the years to come, not only would have TTTI churned out students with sound sustainable living practices, but also would indirectly have had a positive impact in the neighbouring villages. Presently, the course is open only for boys from rural villages in Karnataka who have cleared their class 10 exams with a certain minimum percentage. The institute admits 32 students every year and, currently into its second year, has on its rolls 64 students.

# Sustainability

We want to be the "most admired brand" and have always endeavored to achieve this in by doing business in a sustainable manner. Sustainability is inherent in Toyota culture, and our vision, philosophy and guidelines are true reflections of our commitment for a sustainable future. This is evident in one of the core principles of TMC - "repay the earth and society through technological innovation (and contribute to enhancing the quality of life everywhere)".

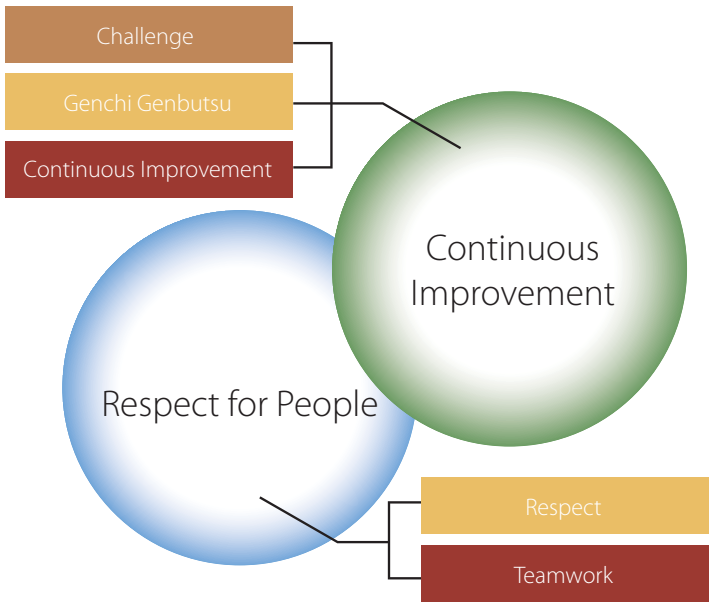
Throughout its journey, Toyota has believed in the guiding principle of "contributing to the development of a prosperous society through the manufacture of automobiles". It provides Toyota with a clear path towards achieving sustainable development and has enabled Toyota to identify three areas of sustainability - Social Contribution, Technology and Manufacturing.



TKM's actions towards sustainability in these areas are explained in the following sections.



## Toyota Way in the Environment



The "Toyota Way", which embodies values, beliefs, principles and business methods at Toyota, is supported by two pillars: Respect for People and Continuous Improvement. Together, they define how the people of Toyota treat others and perform their duties in order to deliver the company's values to customers, shareholders, associates, business partners and the global community.

Toyota Way in the Manufacturing Environment	
Challenge	To create Zero Impact on Environment through Eco Friendly Manufacturing
	Develop Foresight to identify Problems and development of actions considering the long term prespective
	Focussed on a direction towards Sustainability
Kaizen	Visualisation of Problems
	Learning from Mistakes
	Yokoten/Standardisation of Successful Cases
Genchi Genbutsu	Identification of the Problems and Root Causes
	Shared Targets and Emphasis on Quantification
	Tenacity & Persistence in Problem Solving
Respect	Communication of the issues
Teamwork	Development and Motivation of Human Resources

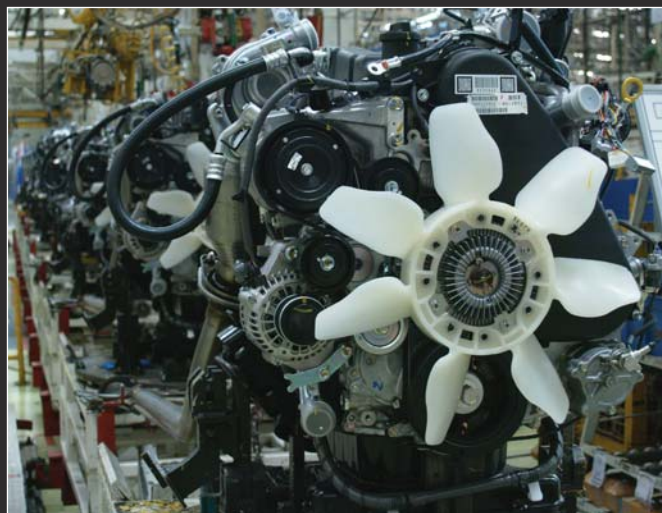
# Technology



The first step that Toyota can take toward a sustainable society for the future is to conduct research and development related to its primary business, mobility technology. Toyota will realize sustainable mobility, which targets an automotive society where people and the earth live in harmony. To do so, Toyota is moving ahead with research and development that at all times takes into consideration the integrated whole of urban spaces and infrastructure, people, and mobility.

Toyota's fundamental stance with regard to technological development is embodied by the terms "Zeronize" and "Maximize." "Zeronize" symbolizes the vision and philosophy of our persistent efforts in minimizing the negative aspects of vehicles, such as environmental impact, traffic congestion and traffic accidents, while "Maximize" symbolizes efforts to maximize the positive aspects of vehicles, such as fun, comfort and convenience, which are desirable in automobiles.

Moreover, to realize sustainable mobility, innovation is necessary in the infrastructure that makes up everything from our home environment to our cities, transportation, and society. Technologies such as alternative energies that sustain the earth, environment, and resources are indispensable as well. Toyota is progressing with research and development in various fields, namely "mobility," "city, transportation and society," "living environment," and "earth, environment and resources," to fulfill its aim of helping to create a sustainable society.



## Product Design

TKM's products namely Innova, Corolla, Prado & Camry being global products, they are sold all over with standard specification.

Designed to match the expectation of all the statutory requirements of all major countries, the VVTI engines are EURO 3 Certified - meeting all the emission norms.

## Parts & Components of Original Equipment

The automobile is an assembly of various parts on a single body and together called the car. In light of the growing environment concerns, each and every part assembled on the car can pose a threat to the environment. As a good corporate citizen, Toyota has taken a proactive approach to recycling geared towards the creation of a recycle based society.

In this regard, Toyota has established Eco - Vas, a comprehensive environment assessment system based on the concept of Life Cycle Assessment in all vehicle development process through production, use and disposal. The Innova & Corolla that is being manufactured in

India have been developed keeping the above mentioned views in mind.

## Elimination of SOC

Toyota's global standard promotes the elimination of substances of environment concern. Hexavalent chromium, Cadmium, Lead & Mercury have been eliminated from almost all the parts of the Innova and Corolla.

Although, there is no requirement or any law on end of life of vehicle in India, we at Toyota have taken up proactively in early elimination to create a better and safe environment for the future generations to come as the SOC's can be very toxic even in small concentrations.

As outlined in our plan, the suppliers involved must completely eliminate the use of the 4 substances of concern. A voluntary audit by the management is carried out at the supplier to ensure that only parts that are free from SOC are dispatched to TKM. The results of the audit are requested by use to confirm the periodic audit at the supplier's end.

## Green Purchasing Guideline

The business operations are becoming more global, the society's expectation of a company contribution has towards sustainable development has expanded. In light of events like this, TKM has come up with a management guideline called the 'Green Purchasing Guidelines' which summarizes the expectations that we have from our suppliers in the area of sustainable development.

The guideline speaks on key issues like enhancing and reinforcing the environmental management through

acquisition of ISO 14001 for all the suppliers. Compliance to statutory requirements is a key issue as it is mandatory to comply with all the applicable environment laws. TKM also request the suppliers to work on continuously improve the

environment performance from their business activities by reducing the CO2 emissions, reducing VOC emissions, reduction in the volume

of waste being generated, reduction of packaging material etc.

We expect our business partners to support this initiative, comply fully with all laws, regulations and practice the management based on the 'respect for people'.

## Awards & Recognitions

In two different studies - IQS and APEAL - constituted by JD Power Awards, Innova has consistently been ranked #1 for the years 2005, 2006 & 2007. Prior to 2005, Qualis was the number one vehicle in the IQS study. Corolla has also been ranked consistently in the top three in both these studies since 2003.

**HEXAVALENT  
CHROMIUM, CADMIUM,  
LEAD AND MERCURY HAVE BEEN  
ELIMINATED  
FROM ALMOST ALL THE PARTS OF  
THE INNOVA AND COROLLA.**



# TOYOTA IMPACT»»

Rainwater harvesting in the factory premises is recharging groundwater and replenishing water sources outside the factory too.



## Rain Water Harvesting

The total rain water generated in the premises will be collected either in the underground tanks/ open ponds, shallow wells. Drainage network will be designed to store maximum quantum of rain water for reuse and to maintain minimum levels in the ponds at eco-forest. The fish and other aquatic life shall be introduced in all such ponds that hold water and does not dry out during lean season and demonstrate for community awareness campaign.

WATER WEALTH

# Environment

The Toyota Earth Charter, based on the Guiding Principles, embodies a comprehensive approach to global environmental issues. It outlines Toyota's basic policy and action guidelines towards effective environmental management and improvements. It underlines a commitment to environmental excellence, not only through broad principles, but in concrete examples of what can be done through action guidelines.

We aim for growth that is in harmony with the environment throughout all areas of business. We strive to develop, establish and promote technologies enabling the environment and economy to coexist harmoniously and to build close and cooperative relationships with a wide spectrum of individuals and organizations involved in environmental preservation.

## Toyota EMS Concept

Incorporating the Toyota Way into our Environment Management System, which underscores the need for continuous improvement, the ISO 14001 has been built into the system such that there is continuous monitoring to ensure that the prime environmental objectives are met. The EMS concept of TKM, as depicted in the figure below, clearly depicts TKM's philosophy of continuously improving our environmental performance that is at the forefront of our environment policy.

Globally, Toyota has encouraged all affiliate plants to be ISO 14001 certified and TKM obtained the ISO 14001:1996 certification within a year of starting operations in India. With a robust EMS system, whose key element is 'Compliance / No complaints' and environment risk mitigation, EMS is applied to drive continuous performance

improvement cycle in line with legal requirements, site specific objectives, and corporate policies and strategies.

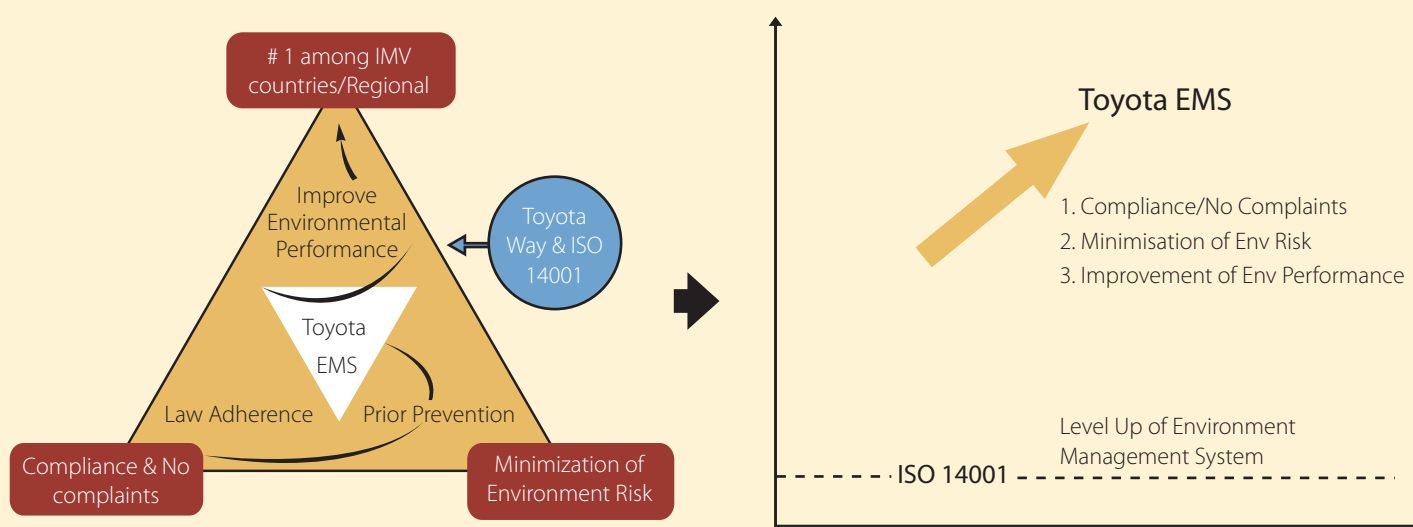
EMS was upgraded to meet the requirements of ISO 14001:2004 and has remained a very efficient system due to the comprehensive quarterly internal audits.

## Environmental Action Plan:

The environmental action plan, which seeks to facilitate promotion of environmental activities across all affiliates by initiating medium to long-term goals, is formulated based on the Toyota Earth Charter. Toyota Motor Corporation (TMC) releases a global five year environmental action plan, which is adapted by each affiliate of TMC to suit their local conditions.

TKM derives its 5 year action plan based on TMC's global plan and what is most relevant to its plant. This is, in turn, divided into annual objectives & targets and circulated to all departments. The environmental plan for FY 2007 - 08 along with action items and targets are produced in the table at right..

We believe our aspiration to be the 'most admired brand' can be achieved by building a strong relationship with our customers, by promoting a sustainable society, and also with our suppliers and dealers. In order to realize this dream we guide our suppliers and dealers to align themselves with our principles as mentioned in our Green Purchasing Guidelines and DERAP programme.



TKM's Model for EMS Improvement

Action Item	Specific action items & goals	Target	
		2007	2008
Reduce CO2 emissions in production & logistics activities of each country & region	<b>Production:</b>		
	Energy Reduction:	4% Redn.	4% Redn.
	Reduction in electricity consumption. (Purchased+generated)(kwh/veh) 20% based on Current year status	577 kwh/veh	553 kwh/veh
	Reduction in electricity consumption. (Purchased+generated)(kwh/veh) 20% based on Current year status	31.82 kgs/veh	30.498 kgs/veh
	Reduction in energy.(Total of Electricity + LPG in GJ/veh) 20% based on Current year status	3.67 GJ/veh	3.52 GJ/veh
	<b>Logistics :</b>		
	Reduction in emission of CO2/unit 15% reduction based on 2006 values	5%	4%
Promote the effective use of resources to further contribute to the realization of a recycling based society	<b>Production :</b>		
	Increase Yield ratio	67.5%	68.0%
	Haz Waste reduction :	4%	4%
	Reduction in generation of Hazardous waste (kgs/veh). 20% based on Current year status (Chemical sludge+Phosphate sludge+Paint sludge)	8.71 kgs/veh	8.33 kgs/veh
	Non-Hazardous Waste Reduction:	2%	2%
	Reduction in generation of Non Hazardous waste (Miscellaneous solid waste) by 20% based on Current year status	15.03 kgs/veh	14.73 kgs/veh
	<b>Logistics :</b>		
	Reduction of packaging & wrapping materials		
Reduce water consumption	Reduction of water consumption by 10% based on current year status (m3/veh)	2% 4.75 m3/veh	2% 4.66 m3/veh
Promote Management & further reductions in the use of Substances of Concern	Eliminate use of four SOC's (Lead, Mercury, Cadmium & Hexavalent Chromium)		
Initiative to reduce VOC emissions	VOC reduction	49.8 gm/m2	49.3 gm/m2
Strengthen consolidated environment management	Continuous up gradation of EMS to meet global standards		
Enhance Environmental Education	In addition to rising employee environmental awareness, Continue conducting Environmental training that contributes to improvement in actual work activities.		
Improve disclosure of environmental information & two way communications.	Enhance the content of environmental reports. Enhance communication with local communities.		

## Environment Key Performance Indicators - FY 2007

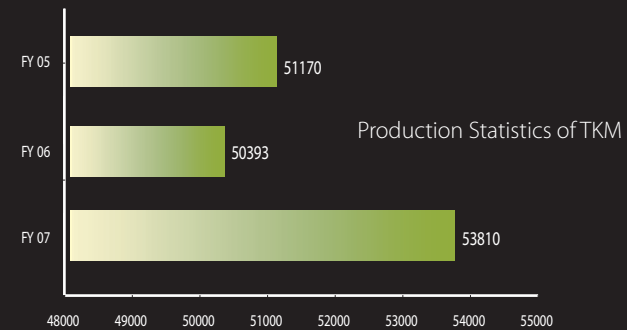
It has been TKM's long term objective to minimize the impacts of its activities, thus contributing to maintaining the balance of economic, social & environment aspects of sustainability. We believe that every action of ours today will affect our next generation, and therefore, utmost care is taken in our daily operations to minimize the impact of our activities on environment. Environmental management system forms the backbone of our commitment towards improving our ecological footprint.

The activities are controlled by monitoring & measuring them and the ratio of analysis is usually based on the per car manufactured basis. Thereby, the vehicle manufactured is always linked with the environment impact due to the manufacturing plant.

The year 2007 saw a dramatic increase in the production of the Toyota vehicles clearly indicating the growing popularity of the brand in the society.

Climate Change is one of the important and widely discussed issues globally and has emerged as a serious threat to contend with. TKM is combating climate change in two areas of its operation:

- 1) Manufacturing
- 2) Logistics



## Manufacturing

To reduce the effect of climate change from the manufacturing activities, it is highly imperative to increase the manufacturing efficiency while we constantly reduce the environment impact from the manufacturing activities. TKM focuses its environment efforts in manufacturing on energy consumption reduction, waste reduction, VOC emission reduction, steel yield improvement and prevention of air & water pollution.

### Energy Management

Automobile manufacturing process requires a large amount of energy. Most of the energy generated is by consumption of fossil fuels leading to an increase of the carbon dioxide emissions. TKM is promoting energy conservation activities in the manufacturing plant using the Five Year Action Plan which sets the annual reduction targets for all the environment parameters. The activities taken up for the reduction of the energy conservation are focus on two key methodologies

- 1) Facilities improvement by upgrading the technology &
- 2) Improvement in the Operational Control Procedures

The reduction effort that is visible is mainly due to the facilities improvement activity namely the installation of VFD or Inverter drive for our high capacity pumps yielding 20% reduction in the electricity consumption company wide. The installation of VFD was a 2 phase project. The first phase of implementation was carried out for paint shop where a company wide reduction of 22% was observed. Last

year the phase 2 of the project was taken up at the Bumper Shop.

As a part of our commitment to reduce our carbon dioxide emissions our team members initiated the idea of using renewable energy on a pilot scale in our repair area of press shop. Currently there are 84 tube lights in the repair area and the source of electricity is drawn from the electricity board. The daily electricity consumption of all the tube lights was 65 kWh/day which led to annual emissions of 19.89 tCO<sub>2</sub>e. After discussions at various levels it was decided to install solar arrays on a pilot scale basis to supply power to these 84 tube lights. After the installation of the solar arrays the results have been encouraging:

- 1, Dependence on the electricity board for power reduced by 50%
- 2, Reduction in the power consumption cost
- 3, Avoidance of 19.89 tones of CO<sub>2</sub> emissions

It is a small beginning in our endeavor to use this abundant and inexhaustible source of energy, and we will continue to come out with similar kind of Kaizens on a larger scale to reduce our carbon footprint.

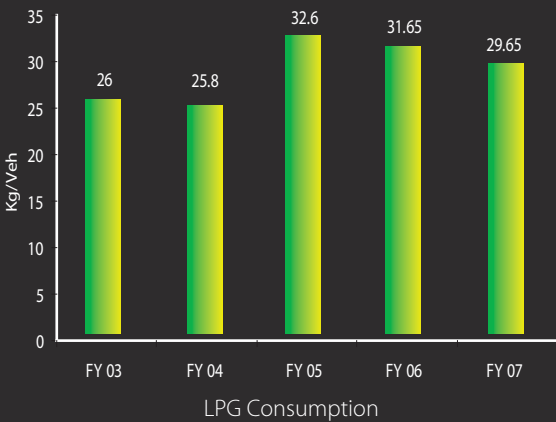
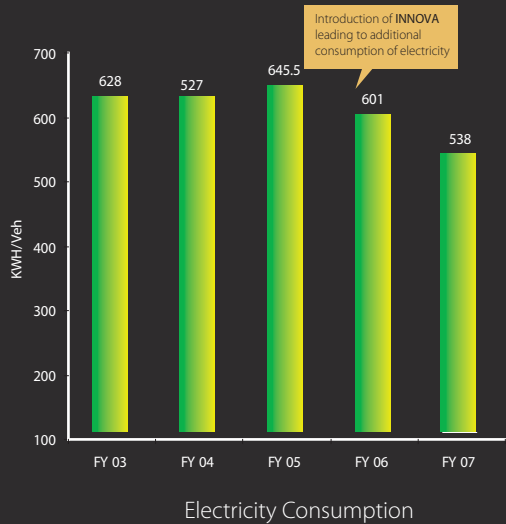
To supplement the facility improvement activity many small improvement activities are being carried out by team members in their work area clearly indicating the eco sensitive mind they possess.



Consumption Trends

Electricity Consumption Trend

Electricity consumption in the production area has reduced as compared to last year which was 601 kWh/ Vehicle and in the current year we have achieved 538.3 kWh/ Vehicle. Our energy demands are met by electricity purchased from Bangalore Electricity Supply Company Limited and on site generation from diesel generator.

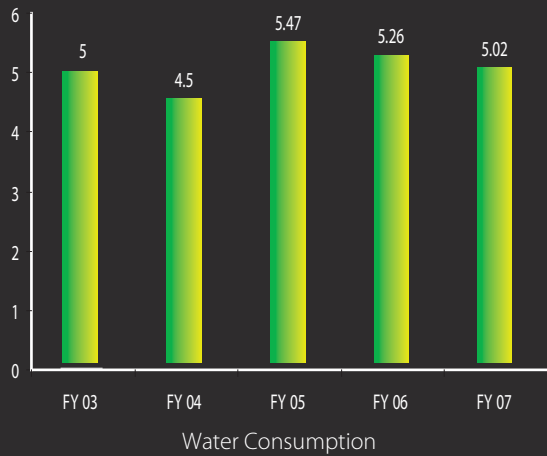


LPG Consumption Trend

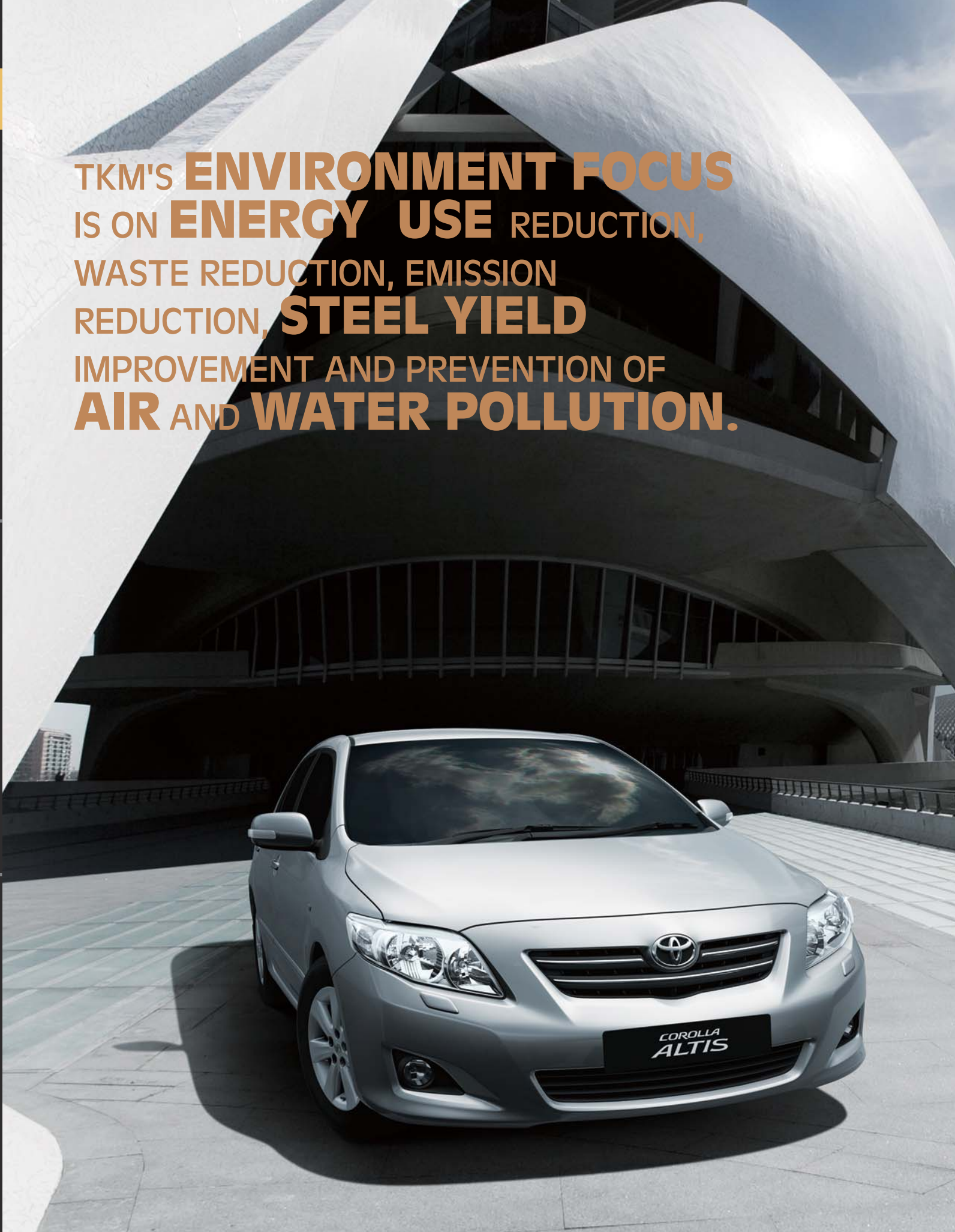
The Gas (LPG) usage was also observed to be on a reducing trend as compared to previous financial year. The main activities that were completed were sequential switch off the burners at the paint shop based on the last body condition and optimization of the oven temperature based on the seasonal requirement.

Water Consumption Trend

Water consumption was again in an reducing trend compared to last two financial years. The main contribution to the reduction efforts were observed at the paint shop where the chemical changeover was made to PLX at the Body PTED line due to which the monthly cleaning schedules of the tanks were increased to once in 4 months.



TKM'S **ENVIRONMENT FOCUS** IS ON **ENERGY USE** REDUCTION, **WASTE REDUCTION**, **EMISSION REDUCTION**, **STEEL YIELD IMPROVEMENT** AND **PREVENTION OF AIR AND WATER POLLUTION.**



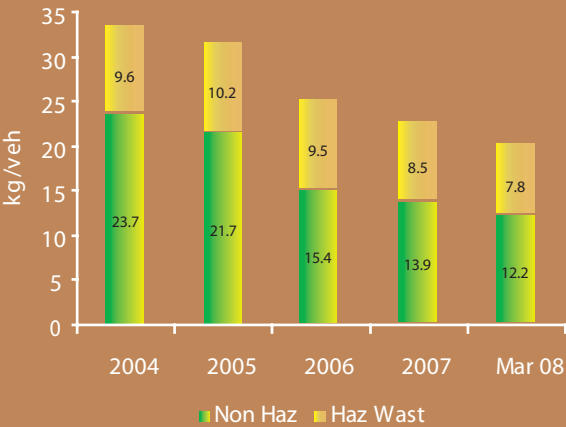
# Waste Management

"Waste" is a local issue with a global impact. Our stated objective is to achieve zero land-fill waste generation. Keeping this point in mind, Waste Management System has been strengthened to recover maximum value from the waste. Waste which is not segregated usually loses its value and finds its way to Landfills.

A strong waste segregation system forms the backbone of efficient handling of wastes. As a result of Team member efforts and initiatives for continuous improvements, TKM has been able to reduce the Hazardous waste by 8.2% and Non-hazardous waste generation by 12.2%. The celebration of the theme based Environment Month Celebration with an aim to reduce Hazardous waste has also contributed greatly.

The Toyota Earth Charter (formulated in 1992, revised in 2000) embodies Toyota's comprehensive approach to environmental issues. The Toyota Earth Charter has been adopted by approximately 530 affiliates worldwide to date. In accordance with the Toyota Earth Charter, the promotion of environmental initiatives by each company is aimed towards the zero waste emissions. This includes the Zero-landfill waste generation. TKM has achieved a strategic milestone in achieving this target during the year 2007-08. This year marked the beginning of the formal authorization and commencement of Hazardous Waste Disposal through Co-

Processing at ACC Cement Plant at Wadi, Gulbarga, Karnataka. As a part of the trial burn process 140 tons of Hazardous wastes were disposed in the initial stage and further continuous disposal shall be facilitated in days to come. The concept of 5R as depicted below has been extensively applied and possibilities for material reuse have been taken up.



A STRONG **WASTE SEGREGATION** SYSTEM FORMS THE BACKBONE OF **EFFICIENT HANDLING** OF WASTES.



# Steel Yield Improvement

Tier 2 of the activity is executed at the steel supplier. The specific requirements are passed on the supplier after close study of his process so that he makes the necessary changes in his system to supply the steel blanks as per the TKM's requirements.

The steel yield improvement activity is carried out in TKM with a dual motto.

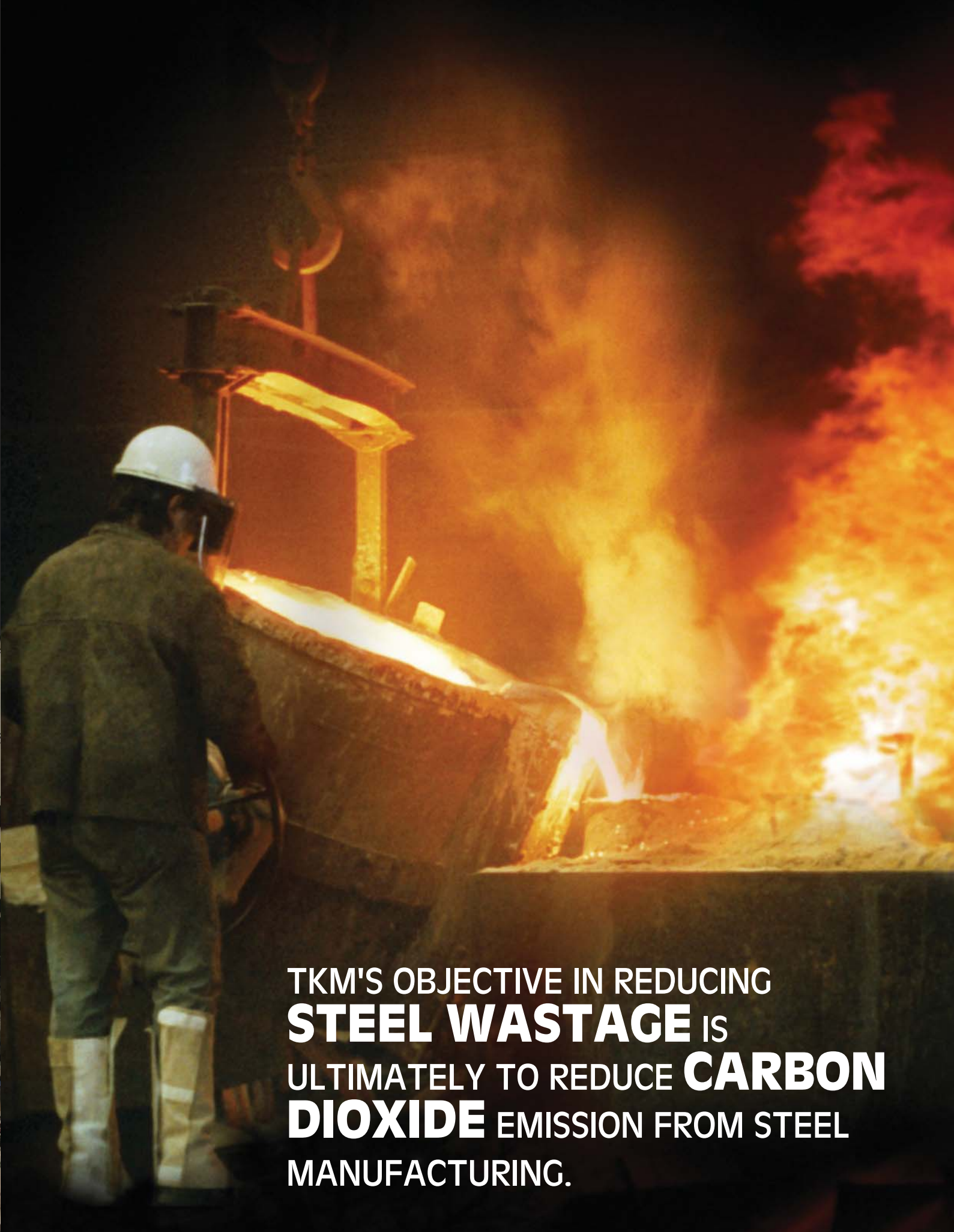
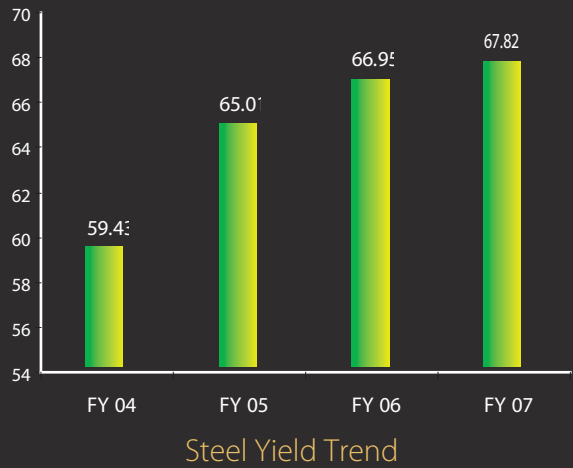
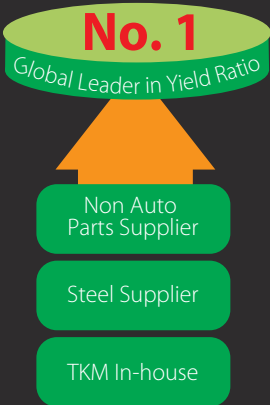
1. Reduction of Steel Scrap which otherwise is wastage of natural resources.
2. Carbon dioxide emission reduction from steel manufacturing.

With this motto the steel reduction activity has been taken in a 3 - Tier Methodology.

The Three Tier Activity will comprise of the executing kaizens at various platform to achieve one common goal called steel yield improvement.

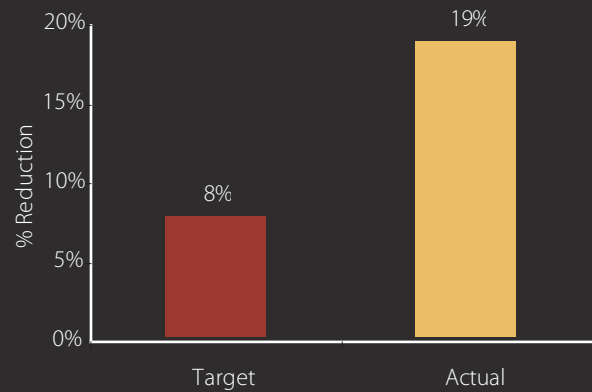
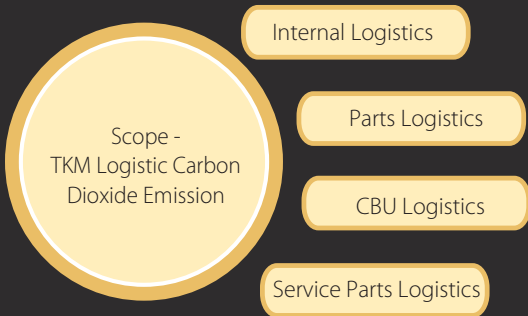
The Tier 1 of the activity is executed inside the Press Shop at TKM. The various scrap panels or offals are examined thoroughly and the scope for reuse is identified. The reuse is done by stamping smaller parts of the car body by utilizing the scrap offals.

Tier 3 of the activity is carried out at the Non Auto Parts supplier where the utilization of our steel for the manufacture of non auto parts like electronic components, locks, gears etc are analyzed. The response in this activity has been very encouraging.



TKM'S OBJECTIVE IN REDUCING **STEEL WASTAGE** IS ULTIMATELY TO REDUCE **CARBON DIOXIDE** EMISSION FROM STEEL MANUFACTURING.

TKM has constantly strived to reduce carbon dioxide emissions from all its activities onsite to ensure a sustainable future for tomorrow. From the year 2006 onwards, we have started promoting environment conservation efforts in our logistic operations which includes transport of our finished cars, production parts & service or repair parts.



Achievement in Carbon Dioxide Reduction

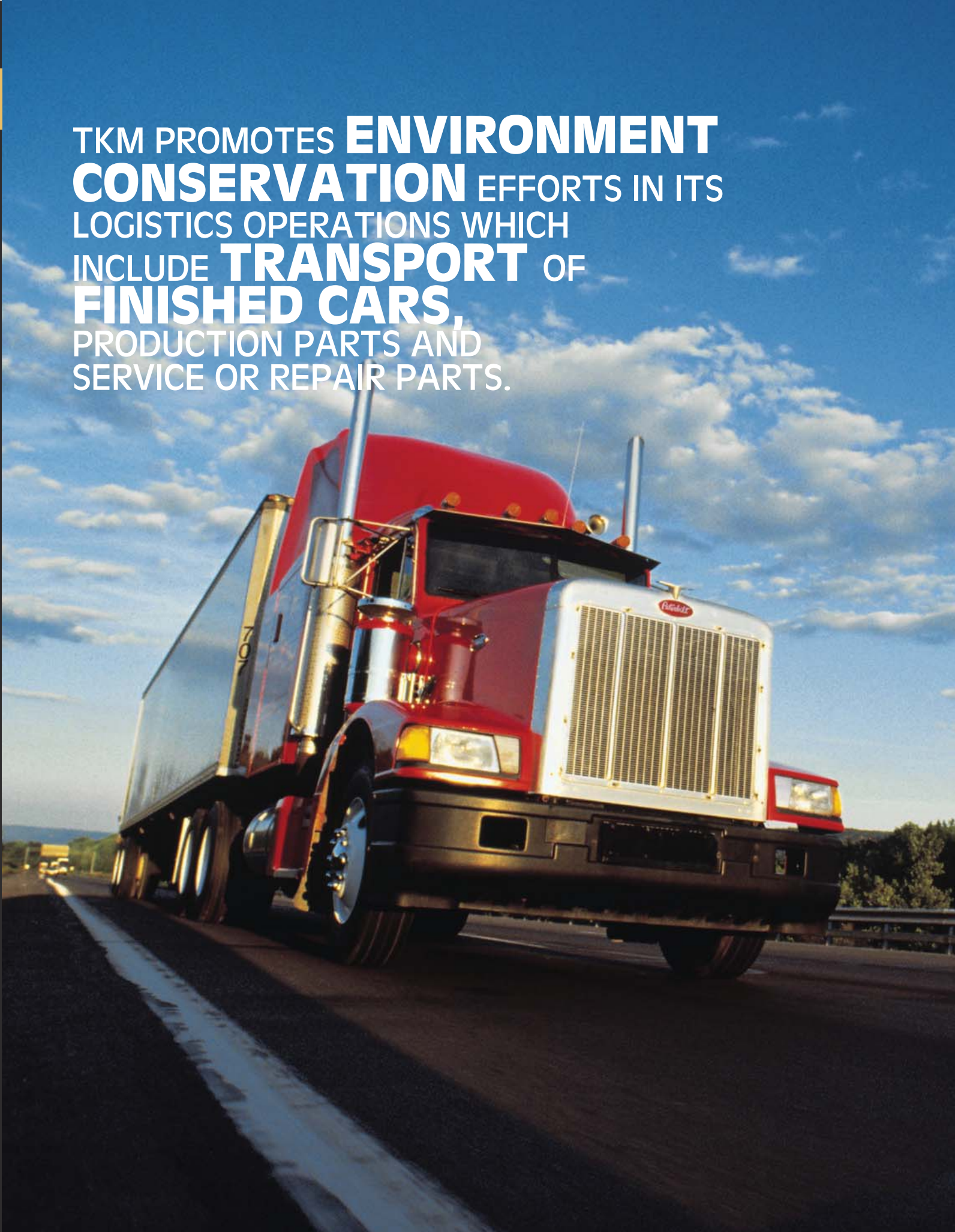
Scope for Carbon Dioxide Emission Reduction at TKM

The main strategy that we have adopted to reduce the carbon dioxide emissions are

Internal Logistics	Layout Review Alternate Fuel Usage
Parts Logistics	Route Optimisation Container Loading Efficiency Improvement
CBU Logistics	Route Optimisation Increasing Modal Shifts
Service Parts Logistics	Route Optimisation Container Loading Efficiency Improvement

With concrete plans and strategy in mind, our logistic division implemented the planned activities and in the end, against a target of 8% reduction of carbon dioxide, we achieved overwhelming results of 19% reduction. The success of the activity has motivated us to continue the improvement activity with more innovations in the form of Kaizens.

TKM PROMOTES **ENVIRONMENT CONSERVATION** EFFORTS IN ITS LOGISTICS OPERATIONS WHICH INCLUDE **TRANSPORT** OF **FINISHED CARS,** PRODUCTION PARTS AND SERVICE OR REPAIR PARTS.

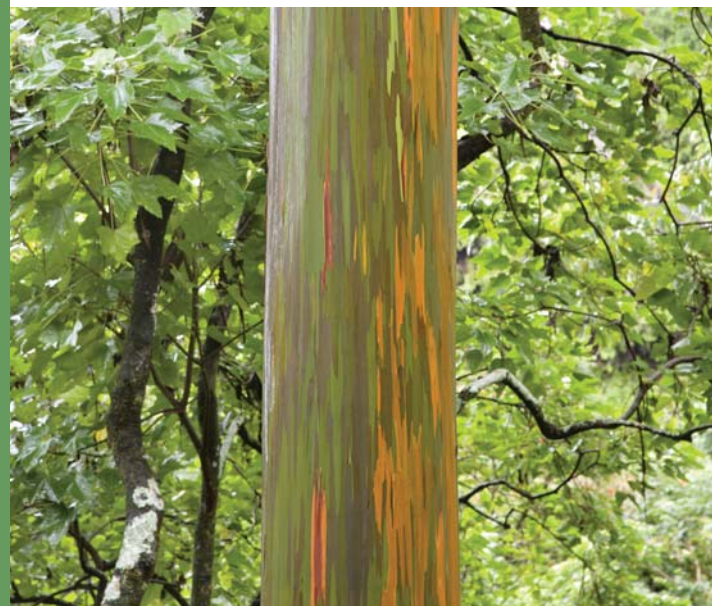


# TOYOTA IMPACT»»

Toyota's forestry initiative in and around the factory premises will ensure clean air in the workplace and will also benefit those living nearby.

## Afforestation

TKM is planning for Afforestation activity in large-scale within the premises covering entire periphery. Nearly 34, 000 m<sup>2</sup> of the periphery is earmarked for the plantation activity. Afforestation will be done with more than 1,00,000 tree saplings mainly focusing on the native species. The atmosphere is expected with enriched surplus amount of fresh air and enjoyable work-place for team-members. This also reduces the load on nature due to production activity.



# Customer

Today's customer believes he is responsible about the product he buys from the market. In this scenario, other than the customer is also bothered about many other issues like environment impacts due to the utilization of the product. We at TKM respect and welcome such customers into our family by demonstrating our Eco Spirit even at the dealerships. Our dealers understand the importance of mitigating the impacts on the environment as a result of the activities.

TKM believes that in order to be truly sustainable, environmental requirements and sustainability philosophy of Toyota needs to be implemented by its dealers. In this regard, Dealer Environment Risk Assessment Program (DERAP) was initiated which acts as a comprehensive tool for monitoring the dealer environment activities. DERAP ensures that dealers are not only compliant with the local environmental needs but are also aware of TKM's environmentally sustainable production system. The programme essentially ensures that the dealers are sensitive to the environmental requirements of Toyota.

A pre-requisite for the dealer to be part of DERAP is to commission an effluent treatment plant. The dealer must also ensure that consent is obtained from the respective local pollution control board to discharge the effluent. The dealer must also be ISO 14001 certified within six months of participating in this programme. In order to ensure compliance with this programme, TKM has dedicated field representatives who conduct monthly checks on all dealerships and monitor hazardous waste handling and disposal, apart from checking their overall environmental awareness.

A compact yet comprehensive form for self audit among dealers has been created by TKM that addresses five fundamental environmental aspects. Starting with the awareness for environment and imparting training for its staff, dealers need to identify the person in charge of the promoting environmental awareness. Training records, and

certification, if any, also needs to be reported. Compliance with the local applicable laws that touches upon the standard operating procedures and environmental policy of the respective dealer is also available.

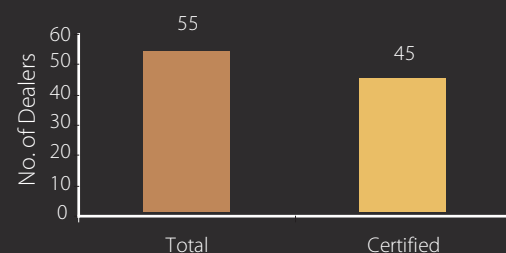
Reporting on the handling of hazardous waste is included that lists the following six commonly occurring wastes:

- Air bags
- Batteries
- Long life coolant
- Waste oil
- Organic solvent
- Oil filters

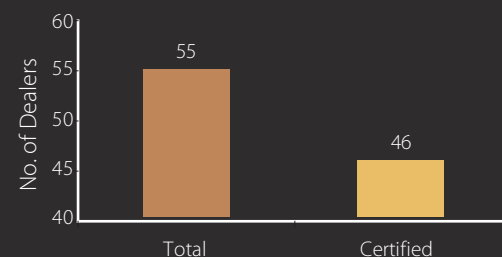
Company entrusted with receiving the wastes and its authorization needs to be reported. Treatment of drainage water with respect to its release, quality measurement and maintenance calls for attention. Finally, recovery of HFC/CFC from the Air Conditioning unit also has to be reported. The rankings for the above five parameters are in the form of smileys that represent 'overwhelmingly happy', 'just ok', or 'disappointed'.

The status of ISO 14001 dealer certification and DERAP implementation are depicted below:

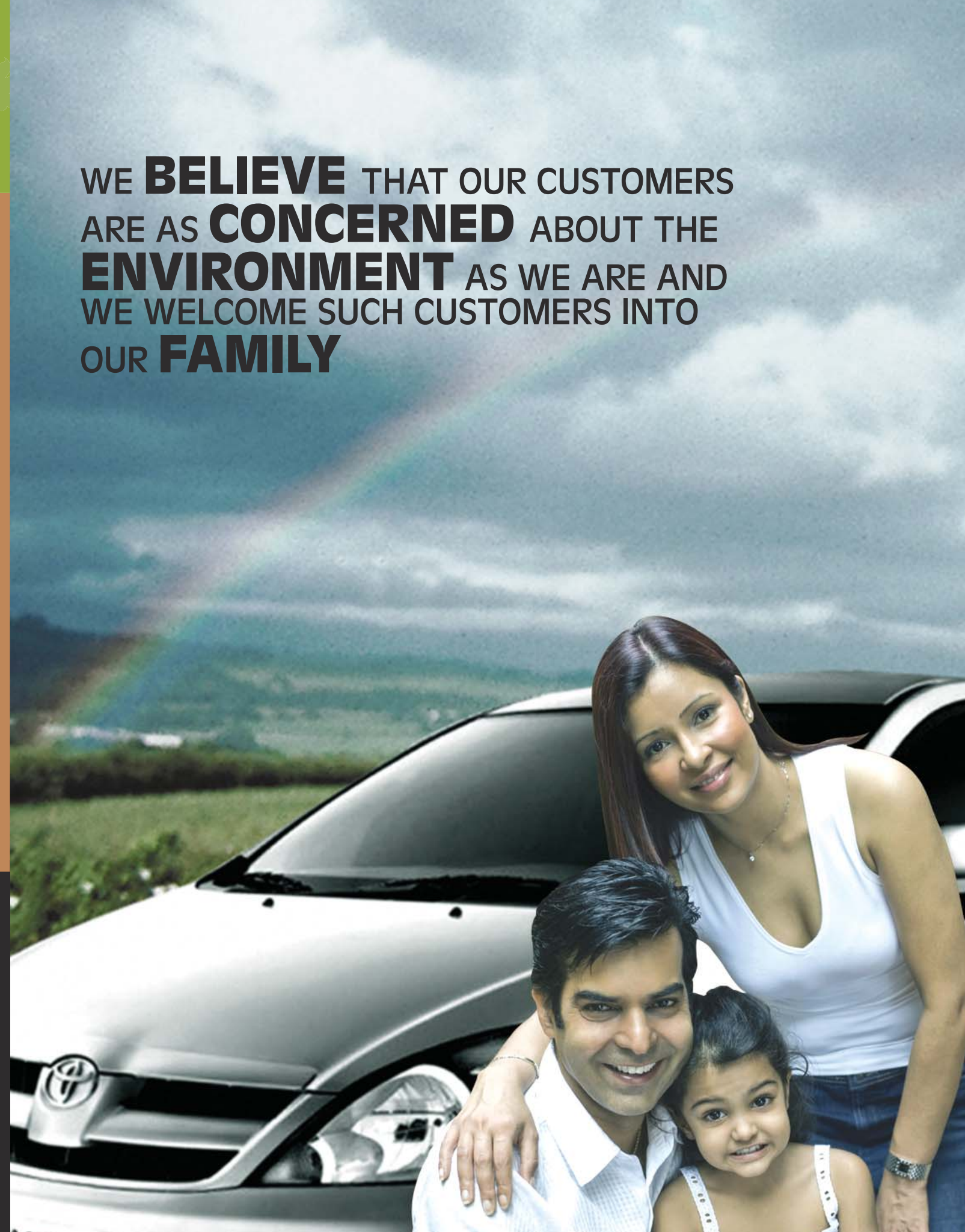
ISO Certification Status of Dealers



DERAP Certification Status of Dealers



WE **BELIEVE** THAT OUR CUSTOMERS ARE AS **CONCERNED** ABOUT THE **ENVIRONMENT** AS WE ARE AND WE WELCOME SUCH CUSTOMERS INTO OUR **FAMILY**



# TOYOTA IMPACT»»»

Toyota's safety education programme is aimed at children aged 6 to 13. The response from the schools has been truly overwhelming.



## Toyota Safety Education Program

The CSR department initiated the Toyota Safety Education Programme (TSEP) in July 2007 in Bangalore. It was an interactive learning programme specifically targeting the students in the age group of 6-13. The main objective of this programme was to promote traffic safety among school children and create an awareness of the road safety procedures. Some of the TSEP activities initiated last year were

- animation film
- mobile traffic park
- traffic booth
- interactive course
- website
- computer game
- giveaways

Among the total response received from 4200 students on the understanding of TSEP among them, a significant 62% responded with an understanding of more than 80% and another 26% had understood more than 60%.

Among the several activities that were part of TSEP, the interactive course, mobile traffic park, animation film and traffic booth were popular.

The encouraging success of TSEP's first year in Bangalore has made CSR initiate this as a national campaign covering the 5 major metros, viz., Delhi, Mumbai, Kolkatta, Bangalore and Chennai.

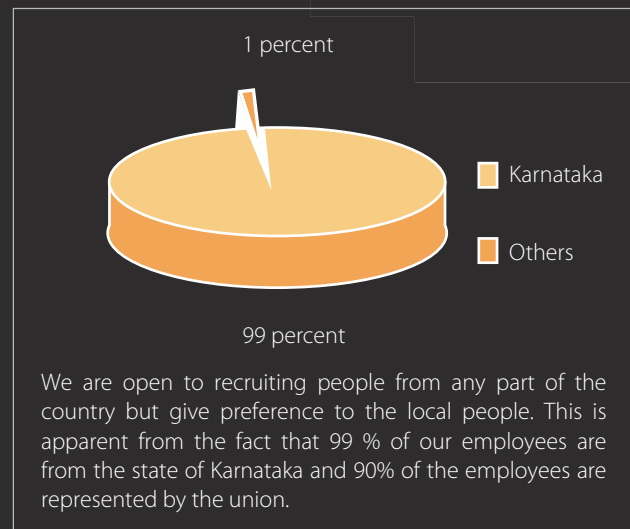
# People

We at Toyota firmly believe that customer satisfaction can only be achieved when the manufacturers of the product namely our team members are happy. TKM strives to create an environment filled with motivation, high performance & creativity among our personnel.

## Human Resources

Our people are the most valuable resource to us and we have a dedicated human resource team that ensures development of right skills, recruits and retains resources capable of implementing our business strategies successfully.

We have implemented several policies aimed at employee welfare to ensure that our employees enjoy the available work environment. The total work force during the reporting period was 2,750 regular employees and 600 contractors. We comply with all laws of the land and strictly prohibit child labor, discrimination based on gender, religion or color, and also discourage any kind of bonded labor practices.

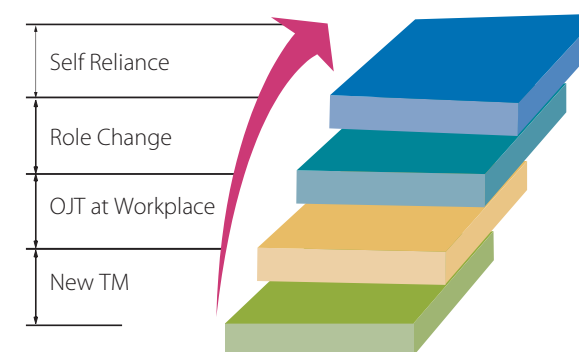


## Attainment of Jiritsuka in Environment Activities

'Jiritsuka' means self reliance; self reliance in environment is a challenge for us at TKM. When we speak about self reliance in environment, it is possible by creation of a culture which breeds environment conscious people. An environment conscious person will automatically think about the environment impact from all his activities irrespective of where and what he is working on.

The primary step towards achieving the goal is by providing environment education to our team members. We believe in order to ensure our environment protection activities spread through the company and reach all the employees, we need to foster environment awareness and ability to think and act in all our team members.

### Training to Team Members



The training to the team members are imparted in a structured manner to gradually create an environmentally conscious mind. On



### TRAINING TO TEAM MEMBERS

Development of an Environment Conscious Mind by generating awareness on the various impacts on the Environment as a result of our activities



### SPECIAL EVENTS CELEBRATION

Organizing Special Events like Environment Month with various individual & team promotional activities for TM's & their Family, Suppliers & Dealers.

every role change, the team member is provided post promotion training focusing on his new responsibilities to support environment management system.

The training to the team members are imparted in a structured manner to gradually create an environmentally conscious mind. On every role change, the team member is provided post promotion training focusing on his new responsibilities to support environment management system.



# Celebration of Environment Month at TKM

Environment month is celebrated in TKM with the sole purpose of addressing Improvement areas and to enhance the level of awareness of the team members.

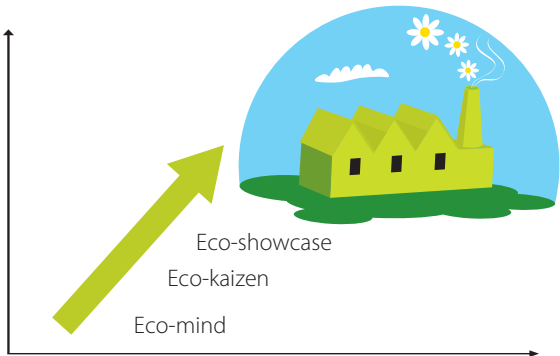
A theme is chosen every year based on the area of prime concern. As a good citizen, we decided to do our mite to reduce the impacts on environment as a result of our activities by focusing on global warming by selecting it as a theme for this year's environment month celebration.

The strategy and the concept for executing our activities were established. The concept focused on the 3 key steps to be followed to align us on the direction to reach a goal to be called as an Eco-friendly plant.

## Themes So Far

- 2003: System establishment for Legal Compliance
- 2004: Look beyond ISO 14001
- 2005: Corporate Social Responsibility (Eco Spirit outside TKM)
- 2006: Address waste - Cradle to Grave
- 2007: Significant Equipment Mgmt
- 2008: Reduction of Global Warming

## Eco-friendly plant



**ECO-MIND** is a culture that we believe must get imbibed into the minds and souls of our team members so that he starts thinking about the environment on every action in his life inside and outside the company.

**ECO-KAIZEN** is the continuous improvement activity that can be executed at the work area. This activity was carried out keeping in view the next plant in mind. The best eco-kaizens will be yokotened to the next plant during the establishment stage itself so that the eco-kaizen activity at the Plant 2 will be carried out directly on par with Plant 1.

**ECO-SHOWCASE** is an effort to promote TKM's Eco Spirit to the community and neighborhood.

TO ENSURE **ENVIRONMENT PROTECTION** ACTIVITIES ARE SPREAD THROUGH THE COMPANY AND **REACH ALL EMPLOYEES**, WE FOSTER ENVIRONMENT AWARENESS AND THE ABILITY TO **THINK** AND **ACT** IN ALL OUR TEAM MEMBERS.

# Eco-mind activity

This environment month, eco-mind activity was focused on two key issues:

1. Training and Awareness
2. Competitions for Team Members and families on environment Issues

General Training on environment and global warming was imparted to the team members followed by focused training on carbon dioxide emission reduction on concepts like

1. Compressed Air Management
2. Waste management
3. Importance of Electricity Reduction.

Competitions for Team Members and their families were organised with a purpose to involve the team member and their family members in a combined efforts towards the reduction of global

warming. The competitions included:

1. Best Poster Competition for TM and children
2. Best Essay Competition for TM's family
3. Best Environment Kaizen Competition for TMs
4. Corporate Citizen Competition

An instance of the concept of sustainability being inculcated is evident among in all team members at the weld shop. Team members of the Weld Shop came out with an environmental dojo (model) which illustrates the importance of sustainable living using available natural resources. The model helps the team members understand and visualize the importance of conservation of nature and usage of renewable source of energy where ever possible. Our model depicts the usage of solar energy, importance of rain water harvesting, water conservation, stresses the usage of wind and hydro power, and imparts knowledge on waste management and power

The environment dojo in the factory serves as a perfect model to spread awareness on green issues

Eco-kaizen activity

TKM's team members have repeatedly proved their commitment when it comes to kaizen we are always the masters. The participation in the Eco-kaizen activity was overwhelming & the results we got in end were encouraging.

This year the activities were focused on:

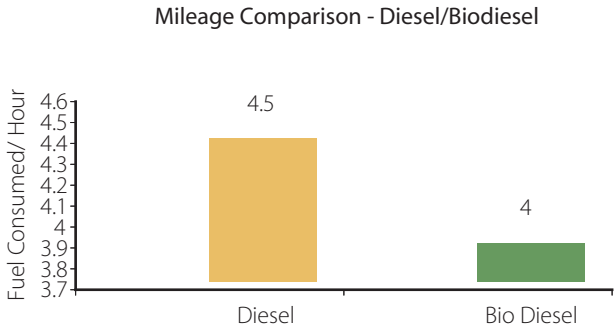
- 1. Establishment of Compressed Air Management System at Shop Floor
- 2. Conducting Theme Based Energy Audit at Shop Floor
- 3. Energy Validation System Establishment
- 4. Alternate Fuel Utilization

Energy management in TKM has been constantly upgrading keeping in mind the requirements of the five year environment action plan which defines our direction towards the path to sustainability. In this regard, various avenues of energy reduction are being constantly explored and improvements are being made on a continuous basis.

Compressed air is used in most of the manufacturing processes in an automobile industry and establishment of the management system is of prime priority. Establishment of Compressed air management system was taken up at all the shops during the environment month as a focused activity towards reduction of global warming due to the consumption of electricity.

Energy validation system was initiated with a motive to identify the scope for kaizen by comparing the actual consumption of the local area in comparison to the ideal consumption derived by the specification as given by the manufacturer. The gap identified as a result of the comparison would be termed as the kaizen possibility. A detailed analysis is carried out to identify the kaizen by the shop environment team.

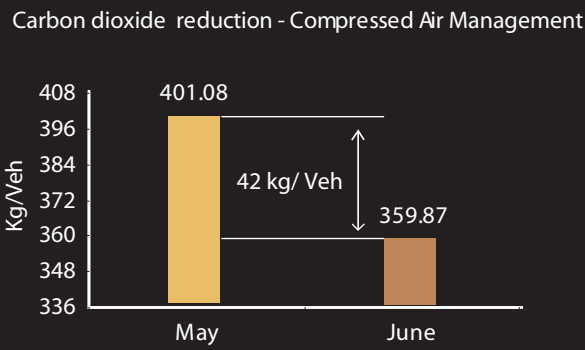
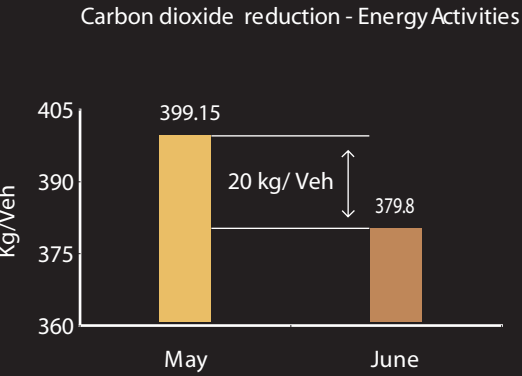
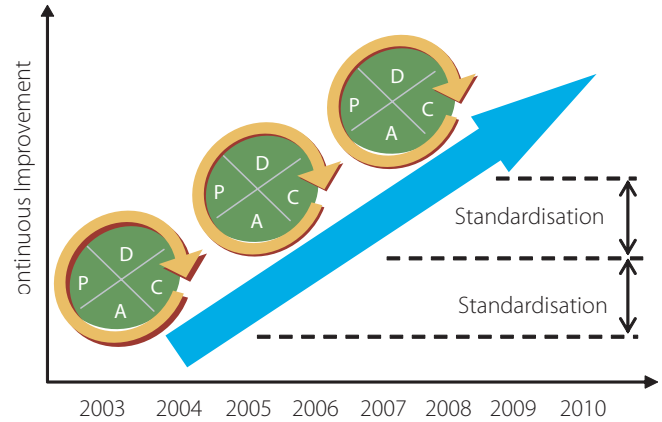
Bio Diesel Implementation was carried out very successfully by the Hyderabad Road Transport Corporation. Our Internal Logistic Division decided to carry out the same operation on a trial basis on 2 Forklifts.



Bio Diesel was procured from the same vendor in the ratio 9:1 (9 Liters - Normal Diesel & 1 Liter B100 Biodiesel). Implementation was carried out for 2 Forklifts yielding carbon dioxide emission reduction of 0.22 Kg/Veh.

A Companywide reduction of 62 Kg per Vehicle was observed as a result of the efforts put in by our Team Members and Management.

Further, the good activities carried out during the Environment Month will be standardized to ensure the sustenance of the activities. Next year one more theme will be taken to continually improve the EMS activities and the Eco-spirit among our Team Members.



Achievers of the Environment Month





WE HAVE DEVELOPED A **PROACTIVE APPROACH** FOR MITIGATING RISKS BY CONDUCTING DETAILED **HAZARD IDENTIFICATION** AND RISK ASSESSMENT EXERCISES AND ADOPTING CONTROL MEASURES FOR **HIGH RISK AREAS**.

## Health and Safety Issues

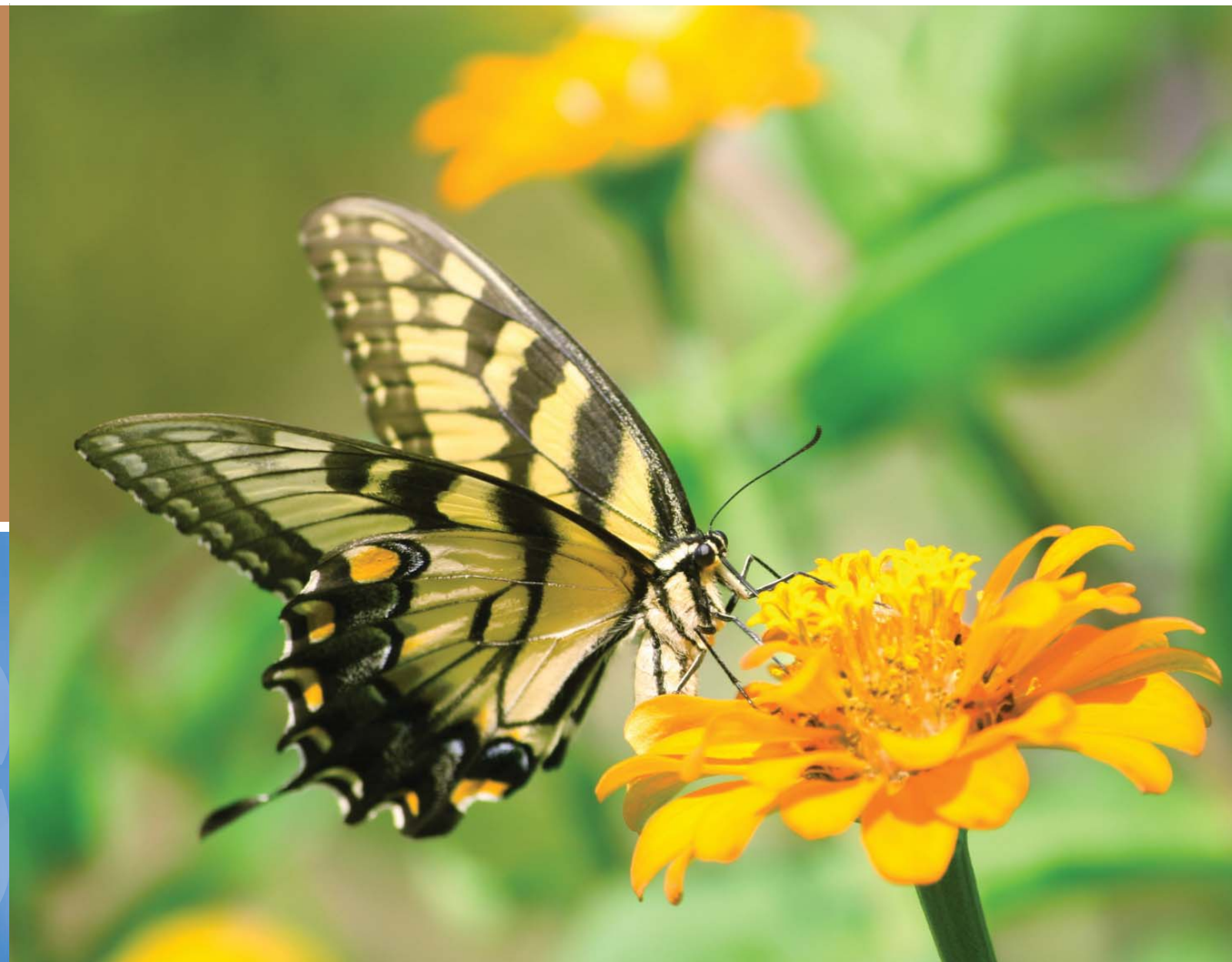
In Toyota, safety of the team members is considered ahead of the other key items like quality, productivity & cost. The top management at TKM is committed to making the team members working environment a safe and enjoyable one. An Integrated safety committee chaired by the MD, comprises of representatives from the Production & the Non Production Areas including the Top Management and safety window persons from the supplier & contractor companies meet once in a month to discuss the progress of safety activities. Any major communications related to accidents or kaizens executed are made for the purpose of information sharing and yokoten.

We have adopted a systematic approach towards occupational health and safety management system. We have developed a proactive approach for mitigating risks by conducting detailed hazard identification and risk assessment exercises and adopting control measures for high risk areas. We have a dedicated safety and environment team which takes care of employee safety and related issues. We have developed an effective communication tool which helps us greatly during any incidents or accidents.



# TOYOTA IMPACT»»

The healthy existence of butterflies are an indicator of the state of the environment. The butterfly park will be TKM's unique way of giving back to the environment.



## Butterfly Park

In the non production area, where the rain water ponds exit shall be utilised to create butterfly park measuring one acre. In this park the plant species with aroma and flowers shall be planted to attract maximum number of butterflies. Such park shall surround the water body as moisture is required to maintain temperature for flowering plants with in acceptable limits.



TKM is an eminent employer in all regions wherever it has its operations and is ready to support the professional growth to its staff. In addition to its role as an employer TKM is actively involved in the development of areas like culture, education, health and environment.

The company's endeavors are within the legal boundaries - to pursue good relations not only with the authorities with whom we deal but also with the state and central government of India.

## Environment Day Celebrations



The Draw your Dream Car competition (also picture at left) at a Bangalore dealer location drew hundreds of participants



Painting competition in progress (also at left)



Winners of the painting competition



Quiz on the environment for schoolchildren



As part of CSR, school books and bags were distributed to children who could not afford it.



Prizes being distributed to environment contest winners (also at right)



# Eco-factory

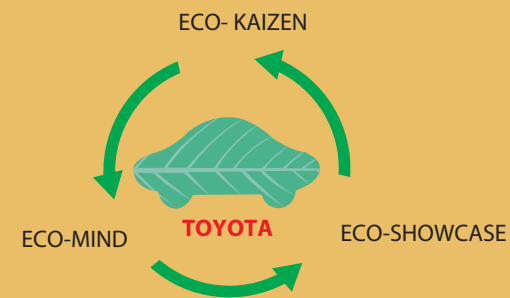
TKM'S vision is to be the best sustainable plant and co-exist with society for long time. Sustainability will be achieved with the best environment technology in production areas, the promotion of large-scale tree plantation, and renewable energy utilization.

The foundation stone for the new plant was laid in August 2008 by the Chief Minister of Karnataka. The new plant has been set up with a dual objective from an operational and environmental point of view:

For Plant #2 to become the best plant in India.

To achieve No #1 status in terms of environment and sustainability.

In order to realize the eco-factory, TKM's EMS concept will take a three-way approach:

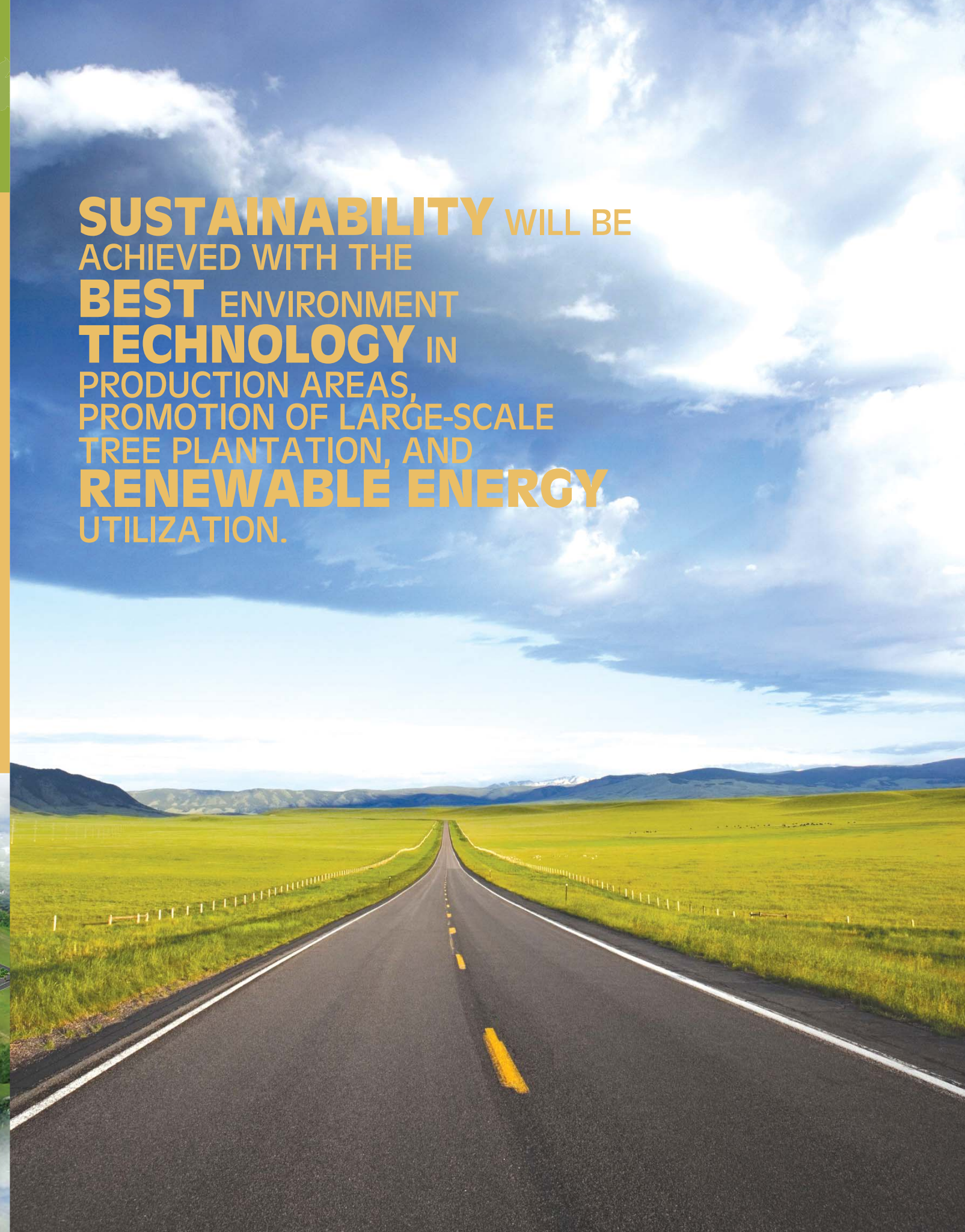


This conceptual approach clearly ensures the implementation of sustainability activity through three key-stone items (eco-mind, eco-kaizen, eco-showcase).

Distinctive targets have been established for each key-stone item during design and operational stage.



**SUSTAINABILITY** WILL BE  
ACHIEVED WITH THE  
**BEST ENVIRONMENT  
TECHNOLOGY** IN  
PRODUCTION AREAS,  
PROMOTION OF LARGE-SCALE  
TREE PLANTATION, AND  
**RENEWABLE ENERGY**  
UTILIZATION.



**NO MATTER HOW BRILLIANT  
THE TECHNOLOGICAL  
REVOLUTIONS, NO MATTER  
HOW USEFUL THE ECONOMIC  
AND POLITICAL INITIATIVES,  
THERE CAN ONLY BE HOPE IF  
MAN CAN CAST AWAY HIS  
ANTHROPOCENTRIC  
DELUSIONS AND SEEK TO FIND  
HIS PLACE IN NATURE, A PLACE  
FROM WHICH HE CAN LIVE IN  
HARMONY WITH THE  
UNIVERSE.**

**SIR JAMES GOLDSMITH**