Towards a Greener Future

Toyota Kirloskar Motor Pvt Ltd
Environment Report 2020

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Message from Leadership

Masakazu Yoshimura
Managing Director

The automotive sector witnessed a series of issues this year, including tighter lending norms, liquidity crunch, and the highest interest and insurance costs. The global pandemic has only worsened the situation. But in spite of all these odds, we could continue to cater to the needs of customers — thanks to all those who have supported us.

We remain committed to supporting India in its journey towards sustainable development. To do this, we are carefully monitoring the Indian market and customer necessities to design the best cars that would satisfy the desires of our valued Indian customers in a sustainable way. Currently, we are working towards enhancing the sales of Self-Charging Hybrid-Electric Vehicles in India by overcoming the challenges of higher prices.

Toyota has always considered the environment as a prioritized stakeholder. We have aligned ourselves with the Sustainable Development Goals by establishing Toyota Environment Challenges 2050, and have announced 2025 targets in an effort to address global environment issues. We will be working with all our stakeholders towards realizing these goals, and will continue our journey towards creating a sustainable society.
We look forward to your continuous support in our future endeavors.

Vikram Kirloskar
Vice Chairman

The automotive industry is transforming towards meeting ever-changing mobility needs through the advancement of technology. However, automobiles are still among the critical factors for climate change. As the world is occupied with finding solutions to this problem, India is also doing its part by restructuring the regulations and taking up initiatives to uphold sustainability. Toyota is proud to be a part of this initiative through the 2050 Environment Challenge in line with the UN SDGs and our philosophy of **"living in harmony with nature".**

Toyota is committed to exceed the expectations of our valued customers. Our products are continuously upgraded with innovative technologies and higher efficiency standards. Our future product lineups are geared up to meet zero carbon emission norms to strengthen sustainability in the mobility space.

In our journey of sustainable development, TKM has made significant achievements on the path of carbon neutrality and net positivity, with the help of strategic five-year action plans. We have also enhanced recyclability of waste towards a circular economy.

I thank all the stakeholders who are associated with us and seek their continuous support in our journey towards a greener future.

Raju B. Ketkale
Deputy Managing Director, Manufacturing

I am happy to present to you our 2019-20 Environment Report. We are honored to utilize this platform to communicate TKM's efforts and achievements towards building a greener future. We are committed to making a positive impact on our society, and towards this attempt, we are functioning inclusively with every individual of our value chain to bring the best possible outcome with respect to quality, safety, environment, and society. Our main approach is to accomplish carbon neutrality and net positivity through our Toyota Environmental Challenge 2050. In action, we have established our 2025 milestones, and developed strategic five-year action plans with clear targets, monitored and managed by our Environment committees.

We have already progressed in our endeavors, utilizing 94% of green energy. We have been meeting 95% of our water demand with recycled and rain water. 96% of waste generated is being recycled in an authorized way. We are not only mitigating our impact on the environment, but also proactively contributing to the betterment of it by educating 6,511 children on the topic of sustainable development in our one-of-a-kind experiential learning center – Ecozone.

I am grateful to all our stakeholders for working passionately in bringing out a good environment performance. We would like to continue our teamwork towards our future milestones.

Company Overview

Equity Participation:

89%
Toyota Motor Corporation

11%
Kirloskar Group

Company Address:

Bidadi Industrial Area, Ramanagara District

Total Installed Production Capacity:

3,10,000
units per annum

Year of Establishment:

October 6, 1997

Markets:

Nepal	India
Bhutan	Mauritius
Brunei	South Africa

Team Toyota Vision 2025

Grow India and Grow with India

Toyota India will contribute to enrich the quality of life in India and help solve societal problems by establishing high standards of safety, technology, quality, and corporate social responsibility

With a spirit to constantly learn, teach, improve, and innovate, all our stakeholders and families will collaborate to help make India a better place

We will strive for excellence in sustainability, ensuring we are eco-friendly in our products, services, and customer experience

Product Portfolio

Toyota


Yaris


Fortuner


Innova Crysta


Camry Hybrid


Glanza


Vellfire*


Urban Cruiser


Fortuner Legender

Lexus


ES 300h


NX 300h*


RX 450hL*


LX 570*


LC 500h*


LS 500h*

* Imported

We saw impact in four key areas:


CO_2 Emissions


Waste


Water


Energy

Environmental Highlights

8.2MW

in-house solar power plants and **18MW** offsite solar installation

3,20,000

saplings planted in total up to 2019-20

94%

of electricity units **(of 53,976 MW/hr)** sourced from renewable sources, resulting in an **offset of 50,197 tons of CO_2**

95%

of water demand met by **harvested rain water and recycled water**

100%

regulatory compliance

6,511

students given environment-related training and education at the Ecozone

All Dealer PIC

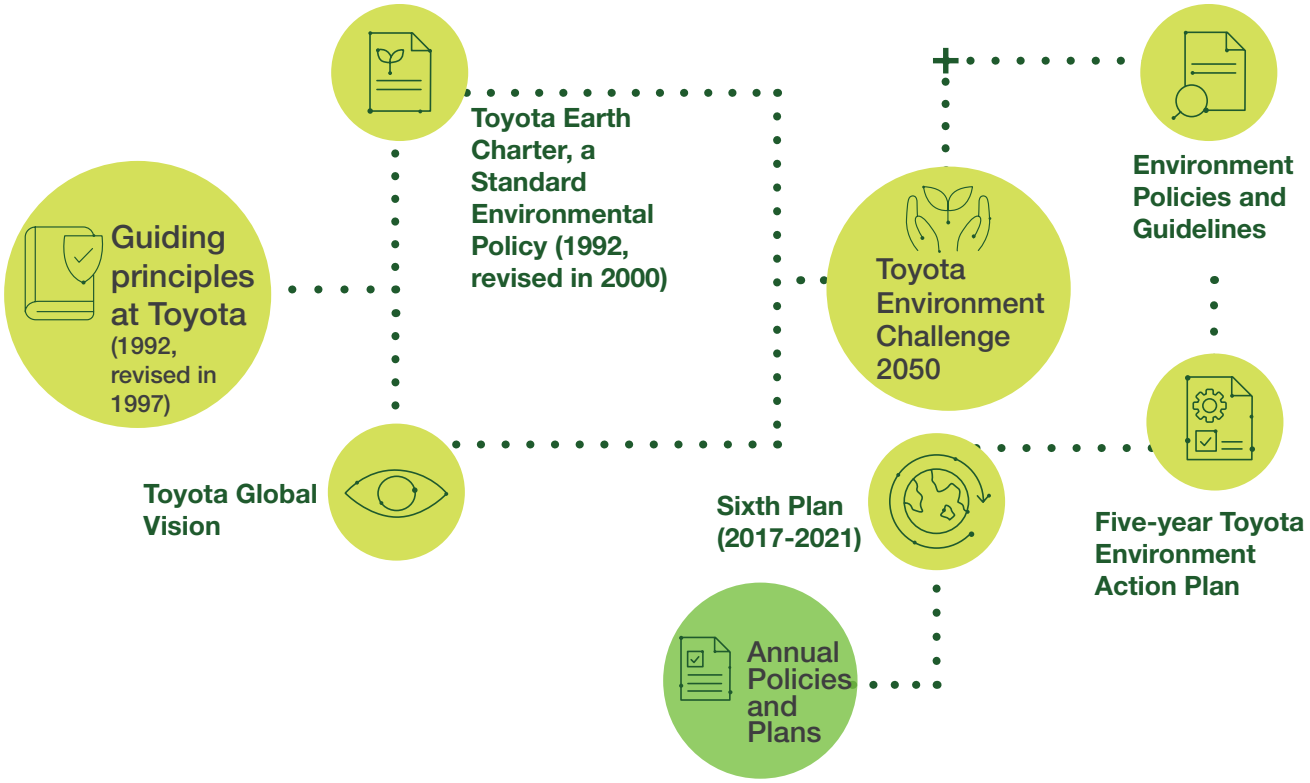
trained in Eco-dealership guidelines

Greener Outlook

At TKM, we direct our efforts towards creating a greener future by investigating and promoting eco-friendly systems and solutions. The same eco-consciousness that guided Toyota's 'Earth Charter' in 1992 continues to inspire us today and we draw on the principles of the philosophy of 'respect for the planet' in all our activities.

Environment Management

We believe that a company-wide policy is integral for uniform environmental management and compliance, and our activities are derived from global standards set by Toyota Motor Corporation.



Environment Policy

We believe that having a company-wide policy is integral to promoting environmental management in operations and compliance with norms. We, therefore, drive all our environmental initiatives through our environment policy, which can be found at toyotabharat.com/toyota-in-india/environment/.

Environmental Subcommittees

We have established Environmental Subcommittees to decentralize the responsibilities of Environmental Management and promote cross-functional efforts to manage key focus areas. Our Environmental Assessment System gives clear directions for each of the subcommittees and the organization is audited by our Asia-Pacific headquarters on the performance against the EAS requirements.

Two subcommittees are included in the Environmental Management organizations in this reporting year:

Chemical Management Subcommittee:

Ensures the elimination of Substances of Environmental Concern and prohibition of banned chemicals in vehicle parts, accessory parts, production materials, and packaging

End-of-vehicle Recycling Subcommittee:

Makes TKM future-ready by enhancing vehicle recyclability

Global EMS

Toyota has developed the Global Environment Management System (GEMS) to strengthen the Environment Management System and to append the ISO 14001:2015. GEMS contains specific directions for implementing a robust Environment Management System. Along with this, TKM intends to go beyond legal compliance and reach out to our value chain in upholding eco-consciousness.

Legal Compliance: TKM and Value chain

We align our vendors, suppliers, and dealers to the environmental laws we follow to have total compliance in our ecosystem. Towards this, our value chain undergoes a rigorous assessment of legal compliance at all stages.

Suppliers

- Basic compliance requirements for suppliers are a part of our general purchase agreements
- Suppliers undergo audits to confirm compliance with basic regulatory requirements
- Prioritized tier 1 suppliers are audited for environmental compliance requirements

Dealers

- An EMS manual for dealerships was designed in 2018

  A star-rating system was developed to rate dealerships on environment management

Waste Management Vendors

- Our compliance criteria for waste management vendors was formulated in 2002
- Vendors are audited before they are contacted, and then annually after they are hired. Hazardous waste vendors are audited bi-annually
- 100% of waste management vendors have been audited for environmental compliance

TOYOTA ENVIRONMENTAL CHALLENGE 2050

The need to protect the environment in the face of human impact has been widely discussed for decades. To push that human impact into a more positive space, Toyota has aligned its recent activities with environmental suitability and reduced resource consumption. At TKM, we have set a challenge for ourselves to go beyond our comfort zone and embrace sustainability in all company initiatives, with a goal of creating a net positive impact by 2050.

2030 Milestones

Challenge 1: New Vehicle Zero CO_2 Emissions Challenge

- **Over 5.5 million global annual sales** of electric vehicles, including over **1 million** zero-emission vehicles (BEVs and FCEVs)
- **The Estimated Result:** Reduce global average CO_2 emission in g-CO_2/km from new vehicles by 35%, depending on market conditions (compared to 2010 levels)

Challenge 2: Life Cycle Zero CO_2 Emissions Challenge

- Reduce CO_2 emissions by **at least 25%** over the entire vehicle lifecycle (compared to 2013 levels) by promoting activities for the milestones of Challenges 1 and 3 with support from stakeholders such as suppliers, energy providers, infrastructure developers, governments, and customers

Challenge 3: Plant Zero CO_2 Emissions Challenge

- Reduce CO_2 emissions from all plants by **35%** (compared to 2013 levels)

Challenge 4: Challenge of Minimizing and Optimizing Water Usage

- Implement measures, on a priority basis, in regions where the water environment is considered to have a large impact
- Complete measures at the four challenge-focused plants in North America
- Disclose information appropriately and communicate actively with local communities and suppliers

Challenge 5: Challenge of Establishing a Recycling-based Society and Systems

- Complete establishment of battery collection and recycling systems globally
- Complete set up of **30** model facilities for appropriate treatment and recycling of end-of-life vehicles

Challenge 6: Challenge of Establishing a Future Society in Harmony with Nature

- Realize 'Plant in Harmony with Nature' — **12** in Japan and **7** in other countries
- Implement activities in all regions where Toyota is based, promoting harmony with nature in collaboration with local communities and companies
- Contribute to biodiversity conservation activities in collaboration with NGOs and other partners
- Expand initiatives both in-house and outside to foster environmental consciousness in individuals who are responsible for the future

Challenge 1

New Vehicle Zero CO_2 Emissions Challenge

Our Approach — Green Mobility

We aim to reduce

90%

of new vehicle CO_2 emissions

by 2050 (compared to 2010 global level emissions) by investing in green mobility.

Transition Towards Hybrid System

Toyota has been a pioneer in green technologies, having developed the technology for Hybrid-Electric Vehicles (HEVs), Battery Electric Vehicles (BEVs), and Fuel Cell Vehicles (FCVs).

Our journey began with the development of Toyota Hybrid-Electric Systems in 1997, followed by the launch of the Prius — the world's first mass-produced hybrid passenger vehicle.

In 2013, we marked a milestone in the history of the Indian Automobile Industry with the launch of Camry — India's first-ever locally manufactured Self-Charging Hybrid EV. As of March 2020, Toyota globally sold a total of **15 million vehicles**, which led to a reduction of approximately **125 million tons** of CO_2 emissions, surpassing our goals ahead of schedule.
In India alone, **3.65 million kg of CO_2** was saved through **4,866** Camry Self-Charging Hybrid EVs.

Indian Hybrid Electric Lineup

Camry Hybrid

Vellfire*

Lexus (Responsible Luxury)

ES 300h

NX 300h*

RX 540hL*

LS 500h*

LC 500h*

* Imported

Preparing for Electric Mobility

We consider the government's push for Electric Vehicles as a business opportunity. We are currently bridging the gap between fuel dependency and eco-friendly mobility by introducing Self-Charging Hybrid-Electric Vehicles.

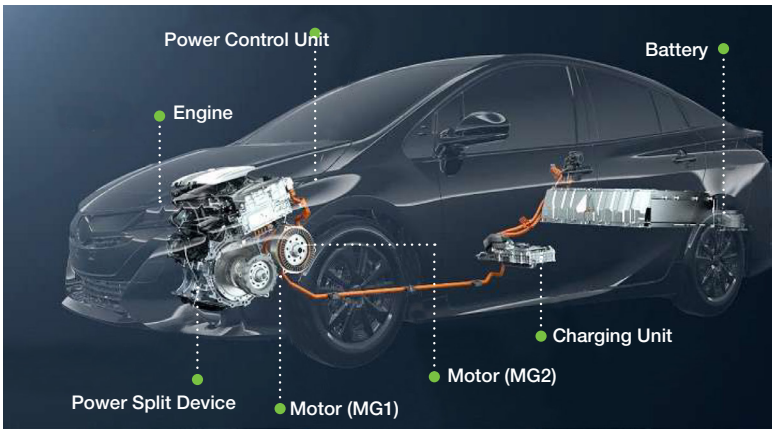
Fostering a Hydrogen-based Society

Toyota considers hydrogen a potential alternative fuel and is actively developing technologies to harness it from various primary sources. In 2014, the launch of FCV Mirai was our first step towards promoting hydrogen-powered vehicles. We will continue our work to make today's launch of the new Mirai a starting point towards the full-scale popularization of a hydrogen-based society.

Mirai's purpose is more than just contributing to a greener future. We want it to play a role as a "public institution" during emergencies, as we strongly believe that a vehicle can play a supporting role during crises. With its DC power supply function, Mirai was able to support the victims of the 2018 Hokkaido earthquake and the 2019 large-scale power outages in Chiba, by supplying electrical power to shelters and households.

Toyota Fuel Cell System (TFCS) has also been leveraged in the 'Sora', a bus that works for and supports society. It is environmentally friendly and can serve as a power source in the event of disaster.

Hybrid Electric Vehicles



The Toyota Hybrid system is an efficient and suitable solution for the Indian scenario. It seamlessly integrates the high torque of a battery-powered electric motor with the efficient power of a petrol-driven combustion engine. Batteries are largely recyclable and can be dismantled and used similarly. THS vehicles are Self-Charging Hybrid Vehicles that completely removes any electric range anxiety as well as the need for charging infrastructure. The Camry Hybrid-Electric Vehicle produces up to two tons less CO_2 per year than an equivalent car in the same class. This will have significant long-term positive effects on the environment.

Hybrid-Electric Vehicle (HEV)
=
Internal Combustion Engine (ICE)
+
Electric Vehicle (EV)

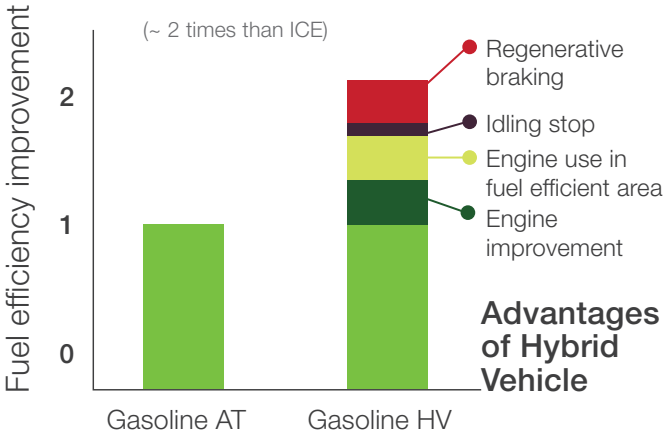
Key characteristics of hybrids:

The several key benefits of HEVs over ICEs and BEVs include:

1 High Fuel Efficiency

HEVs are exceptionally fuel-efficient as compared to ICEs, resulting in reduced CO_2 emissions. The comparison between the two is depicted below.

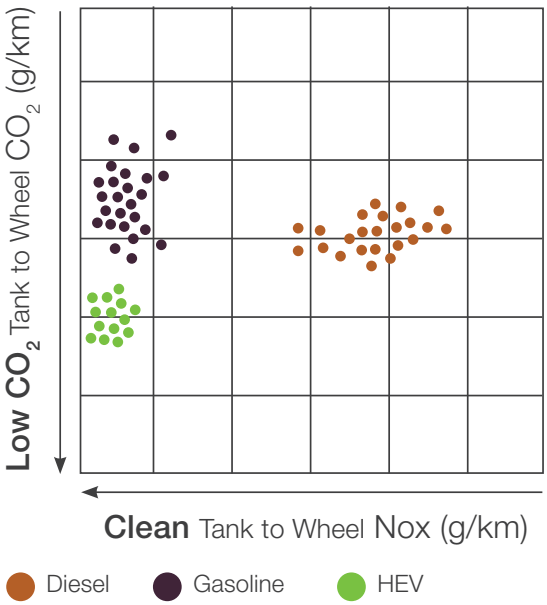
Camry HEVs Fuel Efficiency is 48% better than in conventional vehicles



2 Low Emission

A study in Ireland found that Camry HEVs run 60% in EV mode and that emissions are 1/10 that of BS6.

Europe C- segment (NEDC* mode)
***New European Driving Cycle**



3 Higher Power Performance

HEVs are designed for the 'joy of driving a car'. Since they are designed with two prime movers, they have better power performance than conventional ICE vehicles, with a smaller environment footprint.

Make in India

HEVs are the base of all electrified vehicles and contain the common core components found in all electrified vehicles:

•Motor •PCU •Battery

Customers can use an HEV similar to their current vehicle. This results in a higher volume of production, lowering the costs of the common core components and increasing investment in local manufacturing, leading to Atmanirbhar.

By 2030, 30% of passenger vehicles are targeted to be pure BEVs, 70% continues to be ICE. Electrified vehicles (xEV) helps to electrify the other 70% ICE—a win-win for customers, the environment, and India.

Challenge 2

Lifecycle zero CO_2 Emissions Challenge

At Toyota, we understand that we have a responsibility towards contributing to a greener environment through eco-friendly mobility measures. With this in mind, our Second Environment Challenge aims at developing a carbon-neutral supply chain.

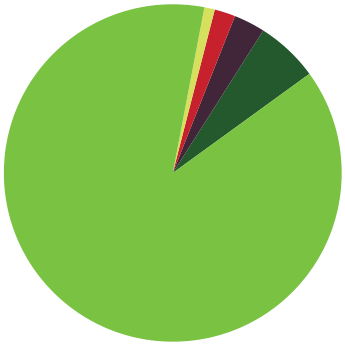
Our Approach - Green Supply Chain, Eco-Dealership Guidelines, and Green Logistics

Assessing The Life Cycle Impact

To understand the impact of our business on the environment, we have started mapping our greenhouse gas (GHG) emissions monthly.

Currently, we are accounting for the Scope 3 emissions from the following categories:

CO_2 Emissions FY 2019-20 Scope 3



- 88% Purchase goods and services
- 6% Fuel and energy
- 3% Downstream
- 2% Upstream
- 1% Employee commuting

Green Supply Chain

In 2016, Toyota revised its Green Purchasing Guidelines to align them to the Toyota Environment 2050 Challenge. At TKM, our primary focus for the reporting year was for the Supplier Kaizen Department from the Purchase Engineering Division to promote CO_2 reduction activities for suppliers. From 2019-21, A CO_2 reduction target of

3% was set with a documented reduction of

3.15% achieved

Focused Activities

Energy reduction training was carried out to all 184 suppliers including management

TKM Best Practices was shared to improve supplier knowledge and awareness

We identified three pillars for supplier CO_2 management: Supply, Conversion, and Consumption and conducted targeted activities under the same

The CO_2 reduction activity roadmap was showcased, highlighting the yearly reduction targets of 3%

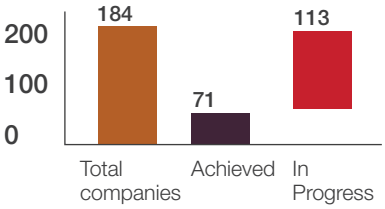
We collaborated with Toyota Kirloskar Supplier Association (TKSA) for afforestation and CSR activities which included:

- Development of **50 acres** of an urban forest
- Plantation of **40,000 native trees** and **10,000 shrubs**
- Sustainment of **74,346 plants**
- Enhancement of **biodiversity**

Supplier Activities

Supply

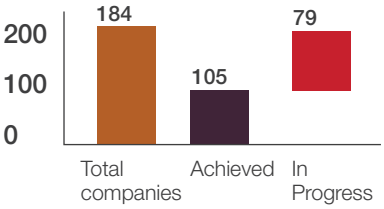
Refers to renewable energy: **184** companies. **71** achieved, **113** in progress
Activities:



RE Initiatives through Management Sensitization

Conversion

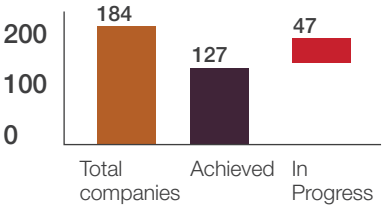
Efficiency improvement of machines: **184** companies, **105** achieved, **79** in progress
Activities:



Efficiency improvement through Energy Leader Training & Development

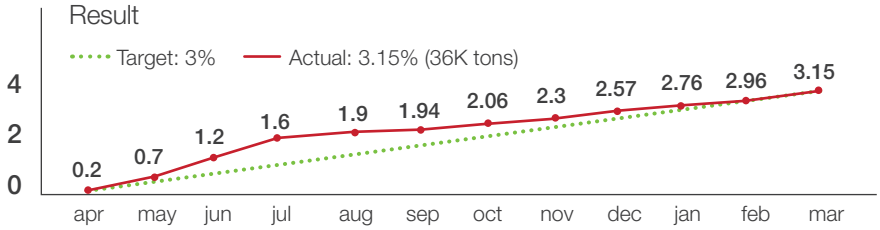
Consumption

Reduction in use of electricity - **184** companies, **127** achieved, **47** in progress: 2019-20 — target was **3%** reduction, achieved 3.15% (36K tons) reduction in CO_2
Activities:



KARAKURI Kaizen Promotion and Culture Building

CO_2 Reductions at Suppliers in % (2019-2020)

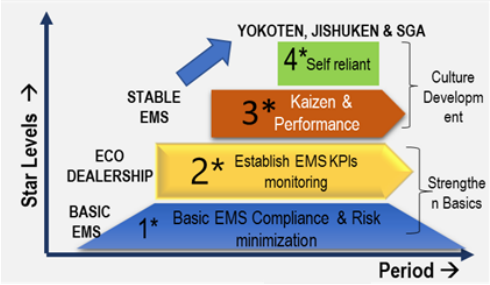


Eco Initiatives at Dealerships

Today, eco standards have been raised and regulations have become more stringent. Considering these new requirements, TKM developed an Environment Management System (EMS) Certification Program for the dealers and has an EMS manual for the same.

This provides details about environmental compliance, training and awareness, resource management, HFC/CFC recovery management, and environment promotion initiatives

This program has four stages of certification classified as 1-Star to 4-Star.



The following are the measures implemented to uphold environmental sustainability at dealerships

CO_2 Reduction Activities

- At TKM, we organized awareness trainings, including Kaizen, for the core dealer team
- We asked all eligible dealers to report their CO_2 emissions as per the set baseline of 2019
- We set a yearly target of **3%** reduction from the 2019 baseline, along with our dealers
- As a CO_2 reduction activity, all dealers are trained on reporting Kaizen implementation with zero investments. Dealers' data collected through the system '**TOPSERVE**'. It is linked with Toyota Challenge 2
- TMC & TMAP aims to reduce CO_2 emission by 32% by 2030 by setting yearly targets for our dealers
- EMS is a fundamental requirement for all dealers; it is not incentivized for objectives or regulations

Case Study: Pilot Dealership

The pilot dealership saw a 31% reduction in Gentan i (per car consumption) in a period of five months. All major dealers were compliant and the activities were assessed, with the best dealership in each region receiving an award during World Environment Month.

The goal was to showcase TKM, and hence Toyota, as an eco-friendly brand by reducing consumption. To do this, we focused on hybrid vehicles and represented the brand in a way that would connect with the youth.

Water Conservation Activities

Effluent Treatment Plant

TKM strongly recommends all its dealers to set up an ETP to spread awareness about the proper use of water. Since the nature of effluents varies from one industry to another, our Wastewater Treatment Plant is specifically for effluents from an automobile workshop. Recycled water is reused for vehicle washing and plantation activities at certain dealer outlets. We can sustain this activity for upcoming dealers and promote the reuse/ recycling of water, thereby reducing water wastage.

Rain Water Harvesting

The rainwater is collected in a small pond. The water collected is then used to wash the cars at most of our Toyota dealerships. Additionally, rainwater is used to recharge the borewells.

Water-borne Paint Implementation:

While there is no mandatory legislation for VOC [Volatile Organic Compounds] emissions, it has been a part of Toyota's global environmental policy to reduce VOC emissions from the painting process. With this view, TKM has introduced water-borne paint technology at all dealerships. Through the water-borne painting process, up to 90% of the hazardous solvent is replaced by water and a ready-to-use base coat paint mixture which reduces the overall VOC levels by up to 47%.

High emission of VOCs leads to depletion of the ozone layer, the formation of acid rain, greenhouse effect (Global Warming), acute diseases (like nausea, dizziness, and asthma), and chronic diseases (like cancer and damage to the liver or nervous system). Water-borne paints are not only environmentally friendly but also safe for technicians to use. About 95% of our dealerships have adopted this technology, which many of our customers have appreciated.

Eco Wash

Servicing vehicles needs a large quantity of water, with an average consumption of about 150 liter/vehicle. To work towards water conservation, we introduced the innovative 'Eco Wash'. This technique eliminates nearly 99% of water usage without compromising on the quality of cleanliness. In FY 2020, about 60% of dealerships used Eco Wash, a huge leap from the mere 8% in 2014. This is mainly seen in major cities and helps dealerships to comply with the local regulations under the Water Act.

Going forward, we are collaborating with all our dealers to enhance customer communication, giving them the option to opt for Eco Wash. This gives us a chance to contribute towards water conservation.

Green Logistics

Logistics emissions are among the major sources of CO_2 emissions in the automobile supply chain. In light of this, we have established a set of logistics that have allowed us to reduce emissions.

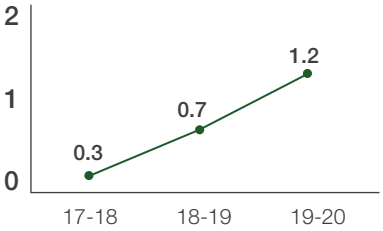
Eco-Driving tips: This year, we have provided 10 Eco-Driving tips to drivers to increase awareness of emissions and road safety

Distance optimization: We have identified shorter routes through continuous study to reduce distance to dealers and customers

Avg. All India Distance (18-19) ->2,090km
Avg. All India Distance (19-20) ->2,070km

Alternate mode: Continuous focus on enhancing rail transport of finished goods, mainly to the East and North regions, helping us reduce approximately 70% of our CO_2 emissions when compared to road transport

All India Rail Transport for Finished Goods (%)



Kaizen implemented in 19-20:

The frequency of trucks between Pune and Bangalore was reduced from 1 daily trip to 1 trip every 2 days

Efficiency improvement - Pune Region

2,04,400 (km/month) Before

Oct 2019 - March 2020

91,250 (km/month) After

Our aim is to achieve

40%

of finished goods transportation through rail by

2030,

which will result in the reduction of emissions by

70%-80%

for transportation of the same number of vehicles

Challenge 3

Plant Zero CO_2 Emission Challenge

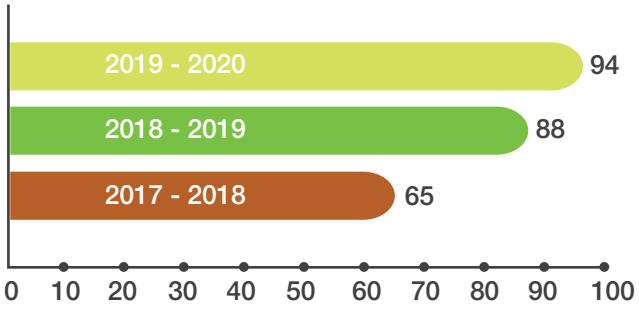
Our Approach - Energy Supply (Renewable Energy), Emission Reduction (SPM, SO_2, Nox, VOC Data)

Energy Supply

Toyota has been continuously and rapidly shifting from non-renewable to renewable sources of energy across its business operations with one of the main focuses being electricity consumption.

Energy KPIs by the Numbers

% of Green Energy

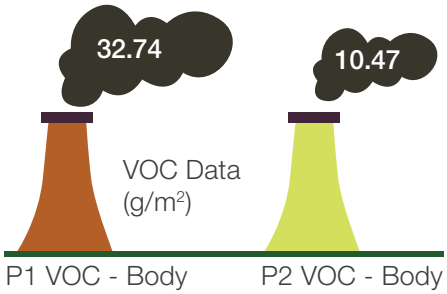


CO_2 Emissions FY 2019-20, Scope 1 and 2

Total Emissions in kg/Veh

Volatile Organic Compound (VOC)

VOC emissions are based on transfer efficiency. Emission occurs while the car is painted as well as baked. VOC is monitored for both lines in the paint shop — ED coating and vehicle body.



To aid our journey towards carbon-neutral manufacturing, we collaborated with various stakeholders to identify the aspects in our production process that needed to reduce CO_2 emissions.

94% of electricity sourced from renewable sources, resulting in an offset of

50,197 tons of CO_2

Key Highlights

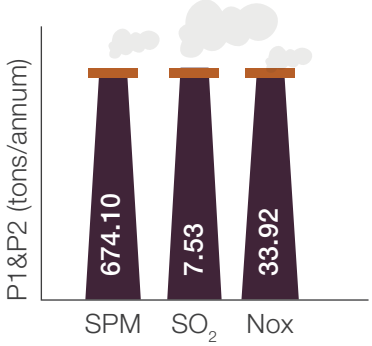
Renewable energy used:
53,976 MWhr

CO_2 emission reduced:
50,197 tons

Suspended Particulate Matter (SPM), Sulphur Dioxide (SO_2), and Nitrogen Oxides (Nox)

Keeping environmental health in mind, we give prime importance to reducing air pollution, especially the release of harmful gases such as SPM, SO_2, and Nox. Our efforts include quarterly monitoring of stack emissions, installing relevant air pollution control equipment, and following the rules of Ambient Air Quality Standards (AAQS).

Following is the table consisting SPM, SO_2, and Nox emission data in tons/annum in the year 2019-20:



Challenge 4

Challenge of Minimizing and Optimizing Water Usage

6 CLEAN WATER AND SANITATION

Total Water Consumption in Production in the Year 2019-20 (m^3)

According to the World Resources Institute, 54% of the Indian geography faces high to extremely high water stress. As our water is sourced primarily from the Cauvery river basin, a single dry season or water shortage could greatly affect our industrial water supply. Therefore, we prioritize water conservation and wastewater treatment and make multiple efforts to deal with water scarcity to create a positive impact on the community.

Where Do We Use Our Water?

Domestic: 207.4 ML/yr

Miscellaneous (Gardening & Toilet flushing): 234.3 ML/yr

Industrial: 321.9 ML /yr

87% WWTP Recycle

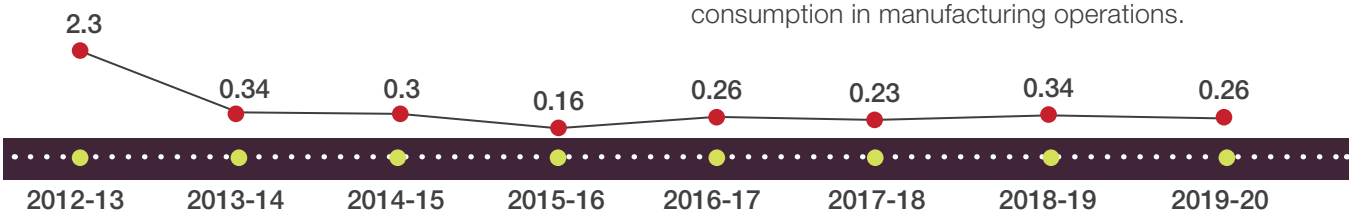
8% Rain water

5% Raw water

Our Approach - Reduce, Reuse, Recycle

Reduce

We strive to reduce water consumption year on year by encouraging robust daily water management practices in both the domestic and industrial sectors of our plant. In doing so, we can consistently reduce water consumption in manufacturing operations.



Specific Freshwater Consumption m^3/veh

Reuse

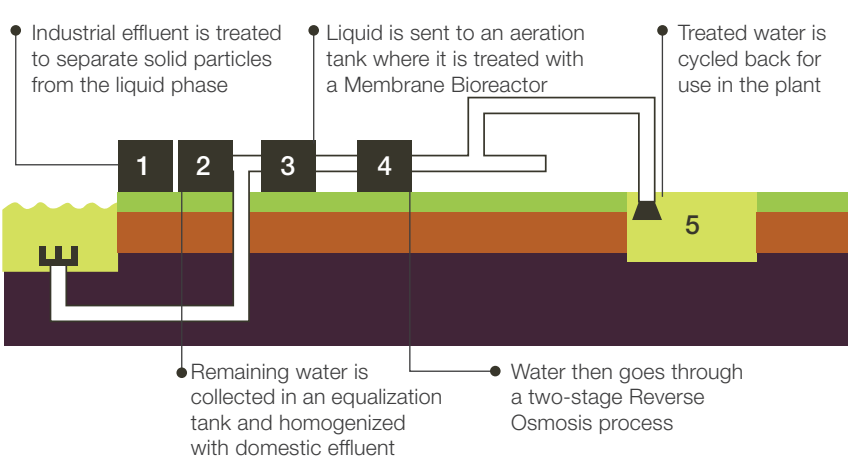
We have been meeting most of our water consumption needs through rainwater harvesting. Rainwater is passed through a Reverse Osmosis filtration system. The processed water is used for industrial procedures as well as in the domestic space.

We have constructed rainwater harvesting systems with a capacity of **51,000m^3** In this reporting year, we utilized **43.347 million liters** of harvested rainwater in production.

Recycle

We have installed a state-of-the-art wastewater treatment plant that allows us to reuse **70-85%** of our wastewater.

In the year 2019-20, we have consumed **303.378 million liters** of recycled water in our operations.



Case Study: Dry Booth Concept

When an automobile is painted, only about **73%** of the paint sticks to the vehicle body. In our traditional booth setup, the other **27%** is collected in the drain below the booth, with the help of water curtains. This comes at a heavy cost in terms of water consumption. To combat this, we designed a dry booth to be implemented in 2021 and scaled up based on results.

In this situation, the paint emissions are collected through two filters — a primary filter that can process high air volumes and a secondary cardboard filter that has high collection efficiency at low pressure loss. This minimizes investment and the need for water treatment equipment to process the sludge. Advantages of this method include:

- **Zero sludge pool water waste**
- **Reduction of sludge waste**
- **High collection efficiency of paint**
- **Prolonged equipment life (rust elimination)**

Challenge 5

Challenge of Establishing a Recycling-based Society and Systems

We understand the industry's potential to cause irreversible damage to the environment. To combat this, we have embraced waste minimization at the source via the 5R strategy (Reduce, Reuse, Recycle, Refine, and Retrieve). These are conscious efforts on our part to ensure resource conservation, optimization, and efficient management as well utilization of waste throughout our value chain.

OUR APPROACH — Resource Optimization, Value Management, End-of-life Vehicle Management

Resource Optimization

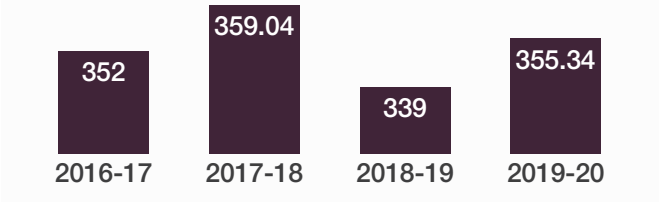
We strive to reduce raw material consumption by efficiently utilizing resources and making continual day-to-day improvements. Our two primary raw materials are steel and paint and they are heavily monitored to ensure efficient use with minimal wastage.

While paint is a non-renewable material, we carefully monitor VOC emissions at every level to ensure zero damage to the environment.

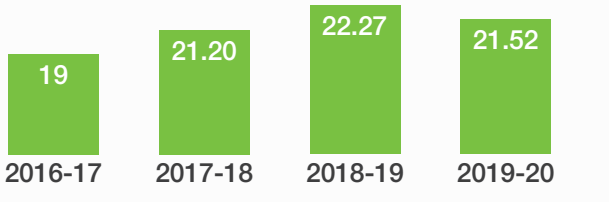
Steel, on the other hand, can be extracted as a renewable material, though we don't use recycled materials as input. However, we do our best to maximize the steel yield ratio and can boast that Toyota India has the most efficient yield at the regional level. This can help lower CO_2 emissions throughout the material's life cycle.

We have also set up a network of steel suppliers, blanking vendors, and non-automotive vendors who use steel as scrap material to further optimize its usage. Thus, we reduce dependency on virgin raw material.

Steel Consumption kg/veh



Paint Consumption kg/veh

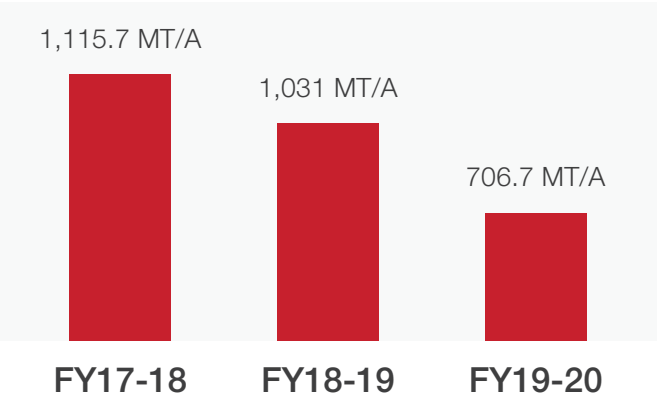


Value Management

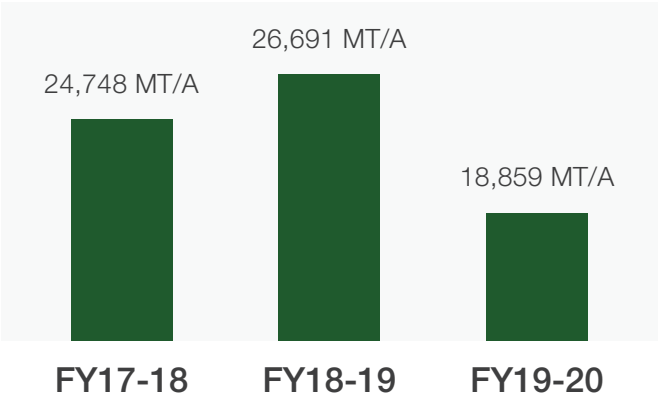
At every level, we are driven by the desire to have zero impact from waste on the environment. We think of waste as **value** — and this mindset has resulted in the development of a waste management system that holds each individual responsible for the waste they produce. Our employees are trained in waste segregation and our waste is processed by certified vendors. The system is heavily audited and recorded at every level to ensure strict compliance.

Production of Hazardous and Non-Hazardous Wastes

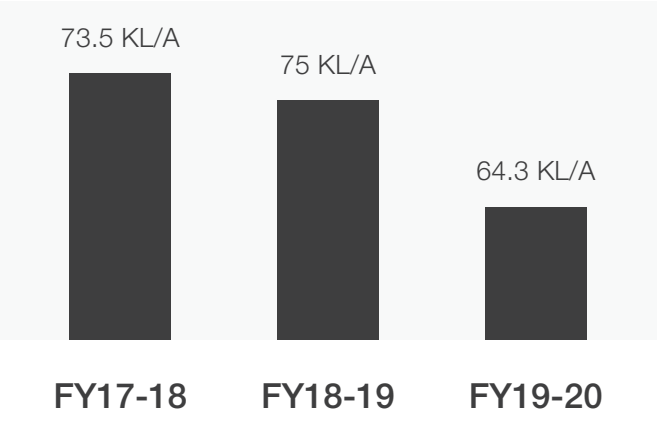
Hazardous Wastes



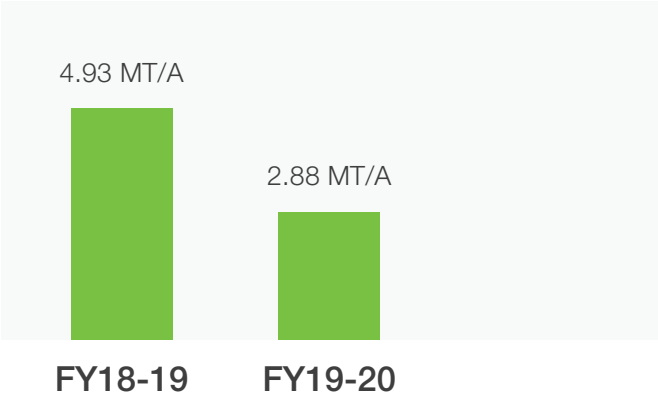
Recyclable Waste



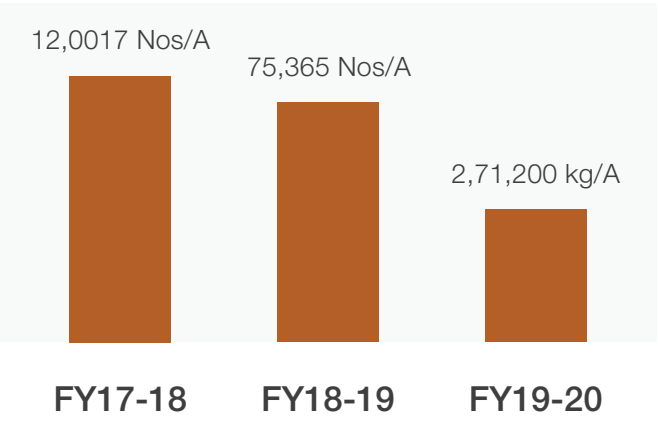
Spent Solvents and Used Oils



Glass Wool (Landfilling)



Empty Containers



As of FY 2019-20, the Hazardous Waste Regulations Authority has instructed organizations to report the Empty Containers data in kg. Hence, we are indicating the data in kg/A, instead of Nos/A.

Sludge Management

Our activities produce two kinds of sludge, chemical and biological. We have found unique, eco-friendly ways to manage and dispose of this waste.

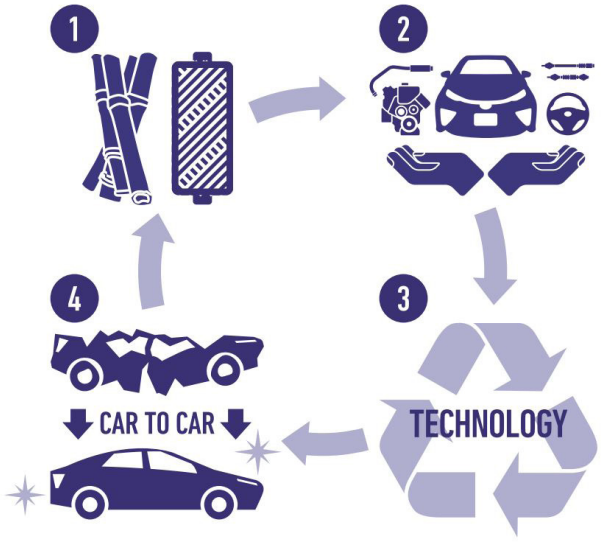
- Chemical sludge is dried in solar sludge drying beds before being transported to cement plants for co-generation. The drying process removes 30-40% of the moisture, thereby reducing the weight of the sludge. This means it can be transported more efficiently, cutting down CO_2 emissions in transport
- Biological sludge is managed through our vermicomposting initiative — we use worms to help breakdown and compost we produce. About 50% is composted in-house while the rest is sent to external vendors

End-of-life Vehicle Management

The End-of-life Vehicle (ELV) sector in India is predominantly an informal one. This is cause for concern. A car — an assembly of hundreds of individual parts — can greatly damage the environment if disposed of improperly. As the auto industry evolves, ELV is becoming a more prominent challenge, with the informal sector being the biggest pitfall. To deal with this threat, Toyota has developed the 100 Dismantler Project

Designed to Dismantle

Toyota regularly visits dismantling companies in Japan and other countries to gain insight into ELV management. These visits allow the innovators at the company to learn how ELV works at a ground level, and develop vehicles with easy-to-dismantle parts.



Case Study: Lexus and Responsible Luxury

Lexus has long provided their customers with unparalleled experiences and unrivaled luxury. Through the years, sustainability and eco-consciousness have been the driving force behind many of our innovations, seen most clearly in our portfolio of Self-Charging Hybrid vehicles. We use recycled steel and non-ferrous metals to manufacture lighter-weight vehicles that help conserve natural resources, reduce fuel consumption, and minimize brake wear.

But that's just the beginning.

From the industry's first bamboo-charcoal speakers to luggage compartments made from recycled plastics, we are always thinking innovatively for sustainable material design. Our material portfolio includes:

- Recycled plastics
- Recycled soundproofing materials
- Stem of kenaf
- Castor seeds
- Sustainable bamboo
- Plant-based sources

Challenge 6

Challenge of Establishing a Future Society in Harmony with Nature

Toyota has always believed in conserving natural ecosystems to maintain harmony between man and nature. Hence, in the sixth challenge, we aim to conserve biodiversity, create awareness, and promote environmental education through collaboration with our internal and external stakeholders. In this vein, we have created and continuously engaged in a variety of activities to establish a society in harmony with nature.

OUR APPROACH — Toyota Green Wave, Today for Tomorrow, and Education for Sustainable Development

Toyota Green Wave

We have been consistently expanding our afforestation efforts since 2009 through cross-functional engagements that involve all our stakeholders. This effort is a vital part of our Environment Month activities each year.

A cumulative **3,20,000 saplings** have been planted inside our premises till FY 2019-20.

14,398 saplings were planted outside of TKM in **June 2019** for Environment Month.

Today for Tomorrow Rejuvenation through Collaboration

Through this program, we engage in large-scale conservation activities, such as lake rejuvenation, in the community. We work together with a variety of conservatory organizations, including IUCN and CII-IBBI, to establish projects that address specific biodiversity-related issues.

This project benefits **5 villages** and over **8,000 people** in the surrounding area.

Lake Rejuvenation

As part of our water and environment conservation efforts, we adopted Abbanakuppe lake to protect the natural resource. We are running this project with the help of the local community to ensure its sustainability. Through this interaction, we encourage the community to take ownership of the lake so they can have a secure supply of safe drinking water for years to come.

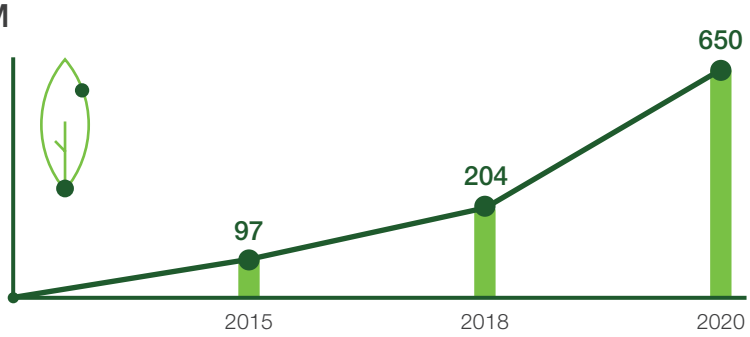
Collaboration with Global NGOs

We have collaborated with the International Union for Conservation of Nature (IUCN) through their 'Leaders for Nature' project. This allows us to exchange our best practices with our peers, benchmark these practices with regional and global environment biodiversity conservation efforts, and respond to emerging environmental challenges. We have also partnered with the Confederation of Indian Industries (CII) under their India Business and Biodiversity Initiative (IBBI) to sustainably streamline our conservation agenda.

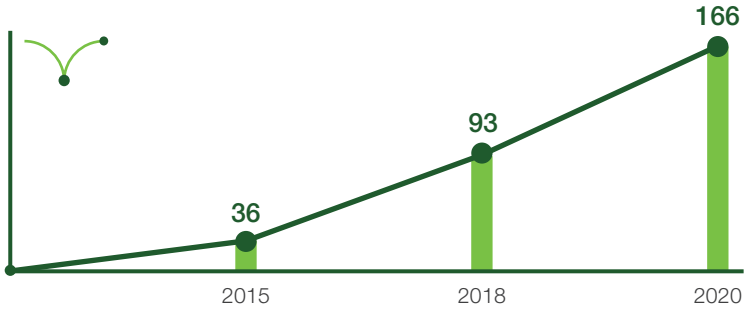
Our Positive Impact:

A study conducted by IBBI has shown a steady increase in the number of flora and fauna in and around our premises.

Flora Species at TKM



Fauna Species at TKM



Case Study: IUCN on Biodiversity

The IUCN assists all our conservation efforts, including our dedicated Ecozone. With their help, we catalog and protect rare and endangered species such as:

Adhatoda beddomei

Botanical name: Adhatoda beddomei
Family: Acanthaceae
Threat Status: Critically Endangered
Common Name: Malabar Nut/ Adusoge/Adhatoda
Distribution: Southern parts of India

A medicinal plant found abundantly in Kerala. This species was used extensively as a cure for respiratory illnesses, thus securing a place under the critically endangered segment of the IUCN Red List.

Rauwolfia serpentina

Botanical name: Rauwolfia serpentina
Family: Apocynaceae
Threat Status: Endangered
Common Name: Indian snakeroot/ Sarpagandha
Distribution: Indian sub-continent, East Asia

An evergreen shrub, famous for its ability to cure a variety of conditions. Because of these numerous uses, it has been heavily exploited over the years and has been included in the **endangered species** list.

Chlorophytum borivilianum

Botanical name: Chlorophytum borivilianum
Family: Liliaceae
Threat Status: Critically Endangered
Common Name: Safed Musli/ Bili Musli
Distribution: Southern Rajasthan, Northern Gujarat, and Western Madhya Pradesh in India.

This rare herb has great economic value, with its curative properties documented as far back as the 11th Century. Its popularity in Ayurvedic, Homeopathic, Allopathic, and Unani medical traditions has made this plant a **critically endangered** species.

Education for Sustainable Development

In our efforts to establish a future society that lives in harmony with nature, we have established a 25-acre Ecozone. This experiential learning center, spread alongside a 500KW solar park and 51,000m^3 rainwater harvesting pond, is dedicated to promoting eco-consciousness among the future generation.

Ecozone

The Ecozone is designed to sensitize visitors and inspire change through a four-tier structure:

- Experience the problem
- Understand its cause
- Create solutions
- Experiment to implement

Case Study: Ecozone

INSPIRING THE FUTURE

As climate change becomes an increasingly pressing issue, it is abundantly clear that the earth, with all its inhabitants and resources, is to be treasured and protected. The scope of human impact on the environment can be one of great concern or celebration. It only depends on how we choose to interact with the world around us. This is something we at TKM understand very well, and we do our best to ensure that our impact on the earth is a positive one.

It is only fitting then, that eco-awareness education is one of the main pillars of our environmental protection agenda. Because we know that it's not just what we do in the present that matters — it's how we equip and inspire future generations.

The Ecozone was created with this very philosophy in mind, visualized as a way to help the younger generation tangibly understand their impact on the environment and learn how to protect it. Here, children can truly experience the beauty of nature and understand how humanity has evolved within and alongside our ecosystems. It takes students beyond the scope of classroom learning and helps them understand the importance of living harmoniously with nature through hands-on training in conservation practices.

From Trash to Treasure

The land on which this park is built was once a dumpsite housing two-decades-worth of waste construction material. We sought to revitalize the area to create a positive impact on the environment. Our initial plans were to incorporate it into our greenbelt efforts. However, we decided that the enriching and experiential Ecozone would be a more appropriate use of the land — turning a site of manmade waste into an ecological treasure trove. Now, the area is home to a diverse collection of flora and fauna, including:

38 Rare Endangered Threatened (RET) plant species under the IUCN category

80 species of birds, including:

2 near-threatened species (Indian River Tern, Black-headed Ibis)
3 Indian state birds (Rose-ringed Parakeet, Indian Roller, White-breasted Kingfisher)
3 Union Territory birds (Sparrow, Asian Koel, Indian Grey Hornbill)
2 National birds (Common Hoopoe, Peacock).

30 species of butterflies

42 species of insects

7 species of reptiles

6 mammals

The Ecozone comprises 17 theme parks which tie into five modules: Water, Waste, Climate Change, Biodiversity, Energy

Toyota Plaza: A showcase of product-related efforts towards environmental conservation including Green Mobility Technology, Toyota Mirai (FCV), and the Solar Charging Center. The key focus of this park is to educate visitors on sustainable mobility. The plaza is located in a green building and surrounded by a lush, natural landscape.

Forest Theme Park: An experiential tour of the four major forest biomes of Karnataka — Dry Deciduous, Moist Deciduous, Evergreen, and Semi-evergreen. Visitors learn about the biodiversity of these regions and the importance of protecting them.

Value Theme Park: In this park, visitors understand the significance of waste management and the importance of developing a zero-waste society by creating value from waste. Visitors walk under an artificial dumpsite, discuss the impacts of waste and waste management on society and the environment, and learn about the 6R concept.

Silent Garden: This innovative space is an exploration of the impact of noise and urban pollution on human health. Visitors enjoy 15 minutes of pure silence in a landscape inspired by Kare-Sansui (dry landscape) and Ryoan-ji's zen garden in Tokyo. Here, students also learn about self-discovery, yoga, and being aware of their surroundings.

Wetland Pavilion: Experience the diversity of the wetlands, a rich region that bridges the gap between aquatic and terrestrial environments. This park is a way for visitors to understand the importance of water for the sustenance of life and the impact of water exploitation. They also learn the significance of this traditional waterbody — its self-cleansing nature, how it acts as a natural water drainage, and how it is affected by urban development.

Pollination Meadow: A beautiful occupancy of non-woody florae — including Buddleja, Stachytarpheta, Asclepias — that attract bees, butterflies, and insects. This park highlights the role of pollinators in the food chain as well as the influences of pesticides, chemical farming, and habitat destruction on their population.

Orchards: A grove of fruit trees cultivated to explain the importance of different nutrients for the body as well as the benefits of trees, multi-culture cropping, nutrient recycling, and sustainable agricultural practices. This section also features three different species of lemons, which offer a prime example of genetic biodiversity.

Solar Theme Park: This park serves to illuminate the need for renewable energy sources in a world where natural resources are fast depleting. Visitors come to understand the workings of solar plants, the concept of green energy, and energy conservation, all through a tour of our in-house, ground-mounted solar plant.

Medicine Garden: A space to create awareness about Ayurveda. This area houses several rare and endangered native medicinal plants, allowing visitors to learn about plants used as home remedies and medicinal products. It has a human-shaped medicinal plantation in which each plant is dedicated to cure diseases related to the human body. This medicinal garden is also home to several of IUCN's rare and endangered species.

Biodiversity Pavilion: This park highlights one of the Ecozone's primary functions — a space to preserve and promote biodiversity. This sector aims at communicating the importance of biodiversity, the impacts of human deeds on it, and how it could be conserved. Leading by example, the Ecozone currently nurtures 650+ species of plants.

Energy Modules: A collection of experimental models that gives visitors a hands-on way to understand different kinds of energy (solar energy, kinetic energy, and potential energy). It includes models of thermal plants, hydropower plants, electromagnetic induction, and more that help explain the workings of these concepts as well as the difference between conventional and unconventional methods of energy generation and the importance of energy conservation, keeping in mind the impact of energy exploitation on the environment.

Education Building: A structure that utilizes traditional native earth building, adopting the design, materials, and construction methods to create a beautiful sustainable edifice. It also serves to explain green engineering, the importance of social spaces in design, and problems with concrete and resource-intensive construction — inspiring visitors to incorporate sustainable ideas into their own homes.

Rainwater Harvesting Pond: An established rainwater harvesting pond, used as the main source of water for the plants of Ecozone. Visitors learn how to build an ideal harvesting pond, along with the benefits of conserving rainwater, recycling rainwater, and recharging groundwater.

Organic Farming and Nursery: A demonstration of ancient agricultural practices along with an explanation of the toxic effects of the chemical and artificial fertilizers that have been used in modern farming since the 19th century. This garden currently cultivates seasonal native vegetables such as carrots, radishes, corn, beans, cucumbers, pumpkins, and more.

Timeline Walk: A unique walk through the history of the earth. It provides an exciting journey through the emergence of species, five major extinctions and the geographical modifications and elements that triggered them, and evolution itself.

Climate Change: This park is located at the highest point of the Ecozone, inviting visitors to look upon nature and all its beauty. They learn the causes of climate change, global warming and the efforts to address it, and individual actions necessary to reduce the impacts. The journey towards this park is cleverly designed to guide visitors from an evergreen forest to a deciduous, and finally to a desert landscape, depicting the reality of the current situation.

Sacred Groves: This park is unique in that it draws a connection between nature and religion. As people decades before have found unique ways to protect arboreal life, we too promote the protection of trees through the lens of spirituality. These forests serve not only to teach visitors about the conservation of different plants offered to gods, and the importance of forest conservation, but also form a home for a wide variety of plant and animal species.

We have been persistently working towards improving and revitalizing even the smallest aspects of the Ecozone throughout our development journey. Our goal is to reach environmental excellence by inculcating innovative ideas.

We reached

6,511

students in the year 2019-20, and aim to influence

10,000

students every year going forward.

Toyota Global Environment Month 2020

To celebrate Environment Day 2019-20, the United Nations chose the theme 'Beat the Air Pollution'. Toyota Motor Corporation formulated its activities based on their own goals, themed 'Toyota Environmental Challenge 2050—Let's do it for Future', where each challenge focused on a particular activity:

- **Challenge 1**
  Promote Eco-Driving activities
- **Challenge 2**
  Evaluate CO_2 footprint across the supply chain and reduce
- **Challenge 3**
  Evaluate CO_2 footprint in TKM manufacturing and reduce
- **Challenge 4**
  Evaluate water footprint and reduce
- **Challenge 5**
  Map your waste and reduce
- **Challenge 6**
  Plant a tree, clean your air

The entire month of June is dedicated to achieve this motive through various environmental activities, conducted at every sector of Toyota Kirloskar Motor.

Highlights of activities:

- Top Management Message on June 4th by Mr. Toyoda and Mr. Akito Tachibana (MD)
- Daily KYT

Reach:

5,794 team members,

66,612 supply chain members,

8,200 customers and schools

Awareness Communication:

- Eco-Seminar – Impacts of air pollution on human health
  Reach: 250 members
- 'I Care' activity at Bannerghatta National Park (conducted in collaboration with Forest Government and NGOs);
  Result: 3000+ seeds dibbled, 4000 saplings bags made, 1 acre weeded, 30 bird boxes constructed, 1 truckload of garbage cleaned up.
- WED Exhibition at KSPCB;
  Reach: 1,500 regulators and general public
- Parisara Jatha; **Reach: 350 stakeholders**

Social Media Contest (theme–no more single-use plastic); **Reach: 4,564 members, 112 posts**

Overall Reach:

5,794 **team members,**
59,691 **supply chain staff,**
22,000 **school children.**

Environmental Month awareness events carried out in various sectors:

Dealers Activities Summary:

Environment Month Kick-off:

- EM started on 4th June at all dealerships and NMEC involving all TMs and customers

Eco-Driving promotion at dealers:

- Eco-Driving training to employees and customers, drawing and quiz competitions to family members, display of 2050 challenge, daily eco-KY, Eco-Seminars, and plantation by TMs

Eco-Kaizen Promotion at dealers:

- Temperature setting and on/off standardization, renewable sources of energy
- Knowledge sharing to GM-CS by TKM and establishing Environment Obeya by dealers about awareness on CO_2 grasping and monitoring

Eco Showcase at dealers:

- Customers explained during dealers visits, testimonials taken
- Eco tips to customers, social media promotion
- Plantation at local community schools
- Beating Air Pollution: Creating awareness of the impacts of open-air burning through a radio jingle – two days
- Eco-brand promotion by engaging 8,800 customers through 70 unique activities with the participation of 2,140 dealer employees
- PR with local community: visits to 6 media houses on 6th June 2019
- Short movie on 2050 challenge played in dealer to sensitize customers
- Showcased Toyota and dealer best practices to local community

Overall Summary

Impact

- **Dealers reached — 100%**
- **Dealer team members participated in KY — >8,470**
- **Number of family members involved — 4,628**
- **Saplings planted — 14,398**
- **Saplings distributed — 13,842**
- **Number of events carried out — 64**
- **Number of outside people reached — 5,20,449**
- **Number of customers sensitized on Eco-Driving — 96,225**
- **PUC check (free campaign) — 2,320**
- **CO_2 emission reduction — 79.6 tons**
- **Electricity consumption reduction — 87,480 KWH/month**
- **Water saved (Eco wash) — 7.9 million Ltr**

Logistics Sub-Committee (PLCD) Activities Summary:

- Promoting Eco-Driving attitudes through awareness trainings, technical seminars, and an eco-quiz
- Mapping and reduction of individual waste through E-waste management and plastic reduction
- Addressing the challenge - Plant a tree, clean your air through plantation activities that included all stakeholders

Impact

- **Eco-Driving training carried out to 1,100 members**
- **Plastic reduction of 588 kg/yr**
- **Plantation of 805 trees and preparation of 4,500 seed balls**

Suppliers & Purchase Team Activities Summary:

- Eco-Mind activities through spreading awareness of 2050 Environmental Challenge and Environment Month, followed by commitment to environmental goals by TKM and supplier management
- Mass Plantation Activity
- Region-wise suppliers awareness program by TKM at Chennai, Delhi, Pune, and Bengaluru
- Eco-Kaizen activities at TKM through sharing of Kaizen and Gemba best practices with suppliers
- CO_2 reduction activities through the promotion of renewable energy using OPEX model and energy reduction by Karakuri Kaizen & ABC M/c classification
- Water reduction activities through rainwater usage and control of water flow through provision floating valves
- Waste reduction activities in the form of reusing of packing poly cover to reduce waste generation and elimination of the flexo film cover by replacing it with a foam cover
- Eco-Showcase activities in the form of mass plantation and distribution of saplings

Impact

- **Overall Environment Month participation — 96%**
- **Number of supplier members participated in Eco-Activities — 58,041**
- **CO_2 reduction — 9,028 tons/annum**
- **Water Reduction — 3,716 KL/annum**
- **Waste Reduction — 8,674 kg/annum**
- **Plantation of saplings — 35,556**
- **Community members involved in “Clean Air Campaign” — 33,693**

Manufacturing Sub-Committee Activities Summary:

- Eco-Mind development activities carried out with the theme “Beat Air Pollution”
- Spread of awareness regarding TKM 2050 Challenges in classrooms. Visits to the Ecozone, Rainwater Harvesting Pond, and Solar Farm
- Introduction to Eco-Friendly Lifestyle (Hasiru Santhe) by promoting 50+ eco-friendly products and holding an exhibition on the latest energy-saving technology
- Eco-Kaizen activity was themed “Incinerable Waste Reduction” to improve TM awareness and promote the 3 Rs (Reduce, Reuse, Recycle)
- Eco-Showcase activities included community focused CSR promotions such as awareness about single-use plastics, plantations at schools, clean up drives, and lake restoration activities
- TKM initiatives were spread through media (published in local newspapers)
- Eco-CSR activities, aimed at promoting the eco-brand image of Toyota, were carried out in local communities
- Activities like building awareness among the community regarding no-plastic usage and switching off engines at signals were carried out
- Eco-awareness activities for students such as plantations on school grounds were carried out
- Community-benefiting projects like cleanup drives and lake restorations were conducted

Impact

- **Number of TMs reached – 2,169**
- **Number of plantations done – 13,153**
- **External stakeholders involved (local community, school children, family members, Govt. officials) – 6,411**
- **Total CO_2 reduction – 200 tons**
- **Savings/Vehicle – Rs.19.5 million/year**

GRI STANDARDS

ENVIRONMENT INDICATORS

CHAPTER	GRI NUMBER	DISCLOSURE	PAGE NUMBER
Environmental Highlights	302-1	Energy consumption within the organization	6
	302-4	Reduction of energy consumption	
	303-5	Water consumption	
	304-3	Habitats protected or restored	
Greener Outlook	308-1	New suppliers that were screened using environmental criteria	7
Toyota Environmental Challenge 2050	301-1	Materials used by weight or volume	9
	301-2	Recycled input materials used	
	301-3	Reclaimed products and their packaging materials	
	302-1	Energy consumption within the organization	
	302-3	Energy intensity	
	302-4	Reduction of energy consumption	
	303-1	Interactions with water as a shared resource	
	303-2	Management of water discharge-related impacts	
	303-3	Water withdrawal	
	303-4	Water discharge	
	303-5	Water consumption	
	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	
	304-2	Significant impacts of activities, products, and services on biodiversity	
	304-3	Habitats protected or restored	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	
	305-7	Nitrogen oxides (Nox), sulfur oxides (Sox), and other significant air emissions	
	306-1	Waste generation and significant waste-related impacts	
	306-3	Waste generated	
	306-4	Waste diverted from disposal	
Challenge 1	301-2	Recycled input materials used	10
	302-4	Reduction of energy consumption	
	305-7	Nitrogen oxides (Nox), sulfur oxides (Sox), and other significant air emissions	

Challenge 2	**301-1**	Materials used by weight or volume	**12**
	303-1	Interactions with water as a shared resource	
	303-2	Management of water discharge-related impacts	
	305-7	Nitrogen oxides (Nox), sulfur oxides (Sox), and other significant air emissions	
Challenge 3	**302-1**	Energy consumption within the organization	**15**
	302-3	Energy intensity	
	302-4	Reduction of energy consumption	
	305-7	Nitrogen oxides (Nox), sulfur oxides (Sox), and other significant air emissions	
Challenge 4	**301-2**	Recycled input materials used	**16**
	303-1	Interactions with water as a shared resource	
	303-2	Management of water discharge-related impacts	
	303-3	Water withdrawal	
	303-4	Water discharge	
	303-5	Water consumption	
Challenge 5	**301-1**	Materials used by weight or volume	**17**
	301-2	Recycled input materials used	
	301-3	Reclaimed products and their packaging materials	
	306-1	Waste generation and significant waste-related impacts	
	306-3	Waste generated	
	306-4	Waste diverted from disposal	
Challenge 6	**303-1**	Interactions with water as a shared resource	**20**
	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	
	304-2	Significant impacts of activities, products, and services on biodiversity	
	304-3	Habitats protected or restored	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	
Toyota Global Environment Month 2020 Initiatives	**302-1**	Energy consumption within the organization	**26**
	303-1	Interactions with water as a shared resource	
	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	

Independent Verification Statement

Scope and Approach

DNV GL Business Assurance India Private Limited (*'DNV GL'*) has been engaged by the Management of Toyota Kirloskar Motor Private Limited (*'TKM'*, or the *'Company'*, Corporate Identity Number U34101KA1997PTC022858) to undertake an independent verification of its environmental performance data presented in its Environment Report 2020 (*'the Report'*) in its printed format and detailed in Annexure 1 of this statement. The disclosures in this Report have been prepared by the Company based on the Global Reporting Initiative's (GRI's) Sustainability Reporting Standards (*'GRI Standards'*) and the performance data has been prepared using TKM's internal protocols for measuring, monitoring, recording and reporting data.

We performed a reasonable level of verification using DNV GL's assurance methodology VeriSustain™[1] for the performance data applying a ±5% materiality threshold for errors and omissions.

The intended user of this Verification Statement is the management of the Company. Our engagement was planned and carried out during February 2021 - March 2021. The scope and boundaries of disclosures is as set out in the Report and covers the environmental performance related to TKM's manufacturing facility at Bidadi, Karnataka for the reporting period 1st April 2019 to 31st March 2020.

Responsibilities of the Management of TKM and of the Verification Provider

The Management of the Company has the sole accountability for the preparation of the sustainability disclosures in this Report and are responsible for integrity of all information disclosed in the printed Report as well as the processes for collecting, analysing and reporting the information presented to us as part of our verification engagement. In performing our work, our responsibility is to the Management; however, this statement represents our independent opinion and is intended to inform the outcome of our verification to the stakeholders of TKM.

Our verification engagement is based on the assumption that the Company has provided us data and information during our review in good faith and free from any misstatements. We were not involved in the preparation of any statement or data included in the Report except for this Verification Statement and Report highlighting our findings for future reporting. We expressly disclaim any liability or co-responsibility for any decision a person or an entity may make based on this Verification Statement.

Verification Methodology

During the verification, we adopted a risk-based approach and a sample-based verification was carried out for a reasonable level of verification. As part of our engagement, a multi-disciplinary team of sustainability and assurance specialists performed work at TKM's manufacturing facility at Bidadi, Karnataka. We undertook the following activities:

- Reviewed the data management systems, data accuracy, information flow and controls that TKM has in place to report the performance data. We examined and reviewed supporting evidence such as documents, data and other information made available by TKM;
- Reviewed of the accuracy and reliability of the data prepared for the Company's reporting purposes for a reasonable level of verification;
- Review of systems and procedures for data collection and aggregation;

[1] *The VeriSustain protocol is available on request from www.dnvgl.com*

- Interviewed selected senior managers and other representatives at TKM, including data owners and decision-makers from different functions of the Company to validate the disclosures made in the Report. We were free to choose interviewees and interviewed those with overall responsibility to deliver the Company's sustainability objectives;
- Review of calibration status of equipment used for measurement of data on a sample basis;
- Evaluated the environmental performance indicators based on the requirements of the chosen GRI Standards.

During the process, we did not come across limitations to the scope of the agreed verification engagement. This verification engagement did not involve any engagement with external stakeholders.

Conclusions

In our opinion, on the basis of our scope of work, we believe that the data and information verified at the operational site i.e. TKM's manufacturing facility at Bidadi, Karnataka, and listed in Annexure 1 is reliable and an accurate representation of its environmental performance data. Some of the data inaccuracies identified during the verification process were found to be attributable to transcription, interpretation and aggregation errors, and the errors have been communicated for correction and corrected.

Our Competence and Independence

We are a global provider of sustainability services, with qualified environmental and social assurance specialists working in over 100 countries. We state our independence and impartiality with regard to this verification engagement. In our judgement, this engagement outcome including associated findings and conclusions does not compromise our independence or impartiality. We were not involved in the preparation of any statements or data related to the performance data in Annexure 1, with the exception of this Verification Statement. We maintain complete impartiality toward any people interviewed.

For DNV GL Business Assurance India Private Limited

Kiran Radhakrishnan
Lead Verifier,
Head - Regional Sustainability Operations
DNV GL Business Assurance India Private Limited, India.

Nandkumar Vadakepatth
Assurance Reviewer,
DNV GL Business Assurance India Private Limited, India.

1st March 2021, Bengaluru, India

DNV GL Business Assurance India Private Limited is part of DNV GL – Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance.
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Annexure 1: Verified Environmental Performance Data

Parameter	*Unit*	*Verified Value (April 2019-March 2020)*
Material		
Paint	Kgs/vehicle	21.52
Steel	Kgs/vehicle	355.34
Water		
Raw Water Withdrawn	KL	252,797
Recycled Water Used	KL	303,378
Rainwater Used	KL	43,347
Energy		
Petrol used in Owned Vehicles	L	21,996
Diesel used in Owned Vehicles	L	31,702
Raw CO_2 used in fabrication	Kgs	286,480
Liquefied Petroleum Gas	Kgs	2,312,727
Diesel in Diesel Generators	L	61,333
Renewable Electricity from Grid	Kwh	52,160,000
Renewable Electricity (inhouse)	Kwh	4,971,115
Electricity Purchased from Grid	Kwh	3,827,000
Emissions		
Scope 1 GHG Emissions	Tonnes CO_2	7,117.46
Scope 2 GHG Emissions	Tonnes CO_2	3,574.42
Suspended Particle Matter (SPM)	Tonnes	674.10
SO_2	Tonnes	7.54
NO_x	Tonnes	33.93
Volatile Organic Compounds (VOCs) – Plant 1	Kgs/vehicle	32.74
Volatile Organic Compounds (VOCs) – Plant 2	Kgs/vehicle	10.47
Waste		
Hazardous Wastes	Tonnes	706.7
Spent Solvents and Used Oils	Litres	64.3
Empty Containers	Numbers	271,200
Recyclable Waste	Tonnes	18,859
Glass Wool	Tonnes	2.88

Note 1: As per reasonable level of verification, we verified 85-90% of the samples were covered during our verification based on our risk-based approach.
Note 2: Paint, steel and volatile organic compounds are estimated based on internal Gentan-i sheets for specifications of vehicle parts and total vehicle production in the two plants at Bidadi, Karnataka.
Note 3: Recycled water used is recorded based on the output of the RO plant (RO permeate readings)
Note 4: CO_2 emission factors used for estimating greenhouse gas emissions due to consumption of diesel, petrol and LPG are as per IPCC guidelines. Grid emission factor used for Scope 2 GHG calculation is based on Toyota Motor Corporation (TMC) group emission factor for India of 0.93 tCO_2/MWh.
Note 5: Hazardous wastes are accounted based on amounts recorded in manifests (Form 10) for wastes sent to authorised recyclers

ENVIRONMENTAL REPORT FEEDBACK FORM

Your feedback is important in helping us improve our Environmental Reporting and Performance. Please take a few minutes to answer the following:

Rate the Report on the Following Parameters:

	Poor	Average	Good	Excellent
Layout and design				
Quality of information				
Transparent approach				
Ease of understanding content				
Usage of GRI Standards				

How do you rate our performance?

Ethics and Governance				
Adherence to Environmental Challenges				
Stakeholder Engagement and Training				
Waste disposal				
Environmental Month Initiatives				
Use of Recycled and Reclaimed Materials				
Reduction in CO_2 Emissions				
Water Management				
Renewable Energy initiatives				

Is there any other information you would like us to include in the next year's report?

How are you related to Toyota Kirloskar Motor PVT LTD?

Employee
Customer
Dealer
Supplier
Industry Peer
Contractor
Consultant
Regulatory Body
NGO Partner
Others:

How do you rate the report overall?

Poor Average Good Excellent

Name :

Organization :

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Telephone :

E-mail :