

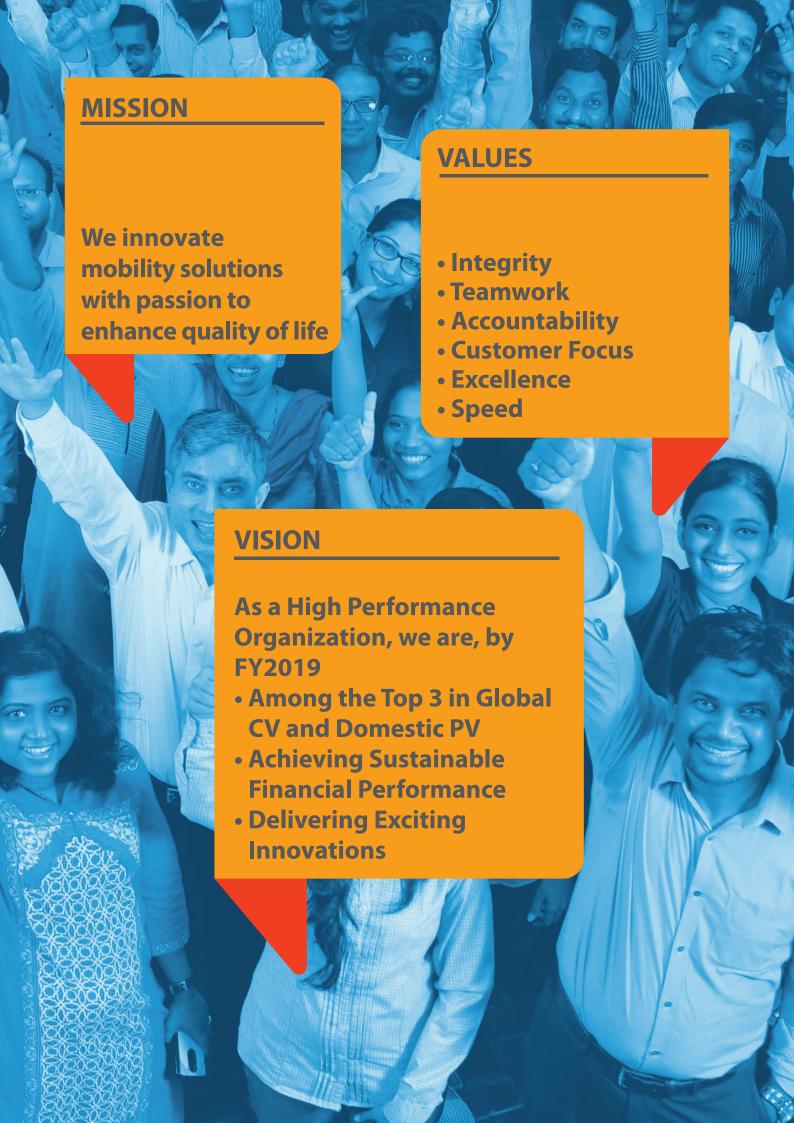




### TOWARDS TOMORROW



SUSTAINABILITY REPORT 2015-16

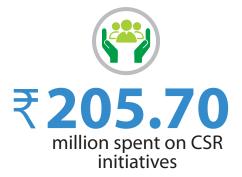


### CONTENTS



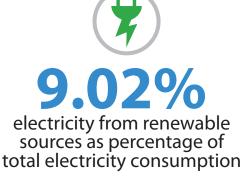
## Sustainability Performance Highlights















### Among 10

Indian companies selected on Dow Jones Sustainability Emerging Market Index 2016!



# Sustainable Plus Platinum Label

for the year 2015 by CII Centre of Excellence for Sustainable Development

# About the Report

This is the twelfth Annual Sustainability report of Tata Motors Limited (TML) following the previous 11th Sustainability Report for the year 2014-15. It details our performance and achievements from 1st April 2015 to 31st March 2016 (FY 2015-16).

This report of TML highlights the performance, initiatives and information of our operations at sites of Dharwad, Jamshedpur, Lucknow, Pantnagar, Pune and Sanand. The report aims to disclose sustainability performance of India operations and in order to be more inclusive, reporting is extended to include the performance of three subsidiary companies and one joint venture (JV) which operate outside the plant premises. The reporting scope has been extended to Tata Technologies Ltd., Pune (72.32% direct subsidiary); TAL Manufacturing Ltd., Nagpur and Tata Marcopolo Motors Ltd., Dharwad in addition to subsidiaries covered in the previous report-TAL Manufacturing Solutions Ltd., Pune (100% direct subsidiary); TML Drivelines Ltd., Jamshedpur (100% direct subsidiary) and Tata Marcopolo Motors Ltd., Lucknow (51%:49%, Joint Venture).

TAL Pune manufactures machines, material handling equipment and automation solutions required for manufacturing automobiles, TMLDL Jamshedpur manufactures aggregates like axles and transmission and TMML Lucknow builds the vehicle body on chassis rolled out by TML. TTL is an Engineering Services Outsourcing and Product Development IT services Company providing services to TML as well as to the global manufacturing industry

Key facts and figures regarding sustainability related data of all the three subsidiaries and joint venture are mentioned in the relevant sections but data on Economic Performance, Product Responsibility and Supply Chain have been excluded for subsidiaries. Advancement in sustainability journey will help us to expand our reporting boundary to include subsidiary companies, vendor parks, JVs and supply chain partners. Entire company's economic performance, permanent workforce and defined benefit plan is reported in particular sections.

The reporting principles and methodology are adopted as per the "in accordance' -Comprehensive" option of the Global Reporting Initiative's (GRI) G4 Guidelines. The

contents of this report have been aligned as per the Indicator Protocol of GRI Guidelines while applying the reporting principles of materiality, stakeholder inclusiveness, sustainability context and completeness and also ensuring adherence to the Principles of Inclusivity, Materiality and Responsiveness. The report is linked to the nine principles defined under the National Voluntary Guidelines on Social, Environmental and Economic (NVG-SEE) Responsibilities of Businesses in India issued by the Ministry of Corporate Affairs, Government of India.

In order to obtain an objective and impartial assurance on the Report, TML has been seeking the same from third party agencies on all its Sustainability Reports since it started reporting. In the current year, authenticity of the data and systems disclosed in Sustainability Report 2015-16 and conformance with 'in accordance'comprehensive requirements of the GRI G4 guidelines has been verified by DNVGL Business Assurance India Private Limited as an independent third party assurance provider. They have conducted the assurance engagement as per Type 2 moderate level as set out in the AA1000 Assurance Standard 2008, the statement of which forms a part of this Report. The assurance statement by DNVGL Business Assurance India Private Limited covers the summary of the work performed, the manner in which the assurance engagement has been conducted, the extent to which TML has applied GRI G4 Guidelines and the conclusions on the Report.

### **Company Overview**

TML is the largest manufacturer in Indian automotive industry. It is the leader in commercial vehicles, and among the top in passenger vehicles. This year we recorded a total turnover of ₹466.46 billion and total profit after taxes accounted to ₹2.34 billion. During Fiscal 2016, sales in the domestic CV industry registered a growth of 9.6% in volumes and the domestic PV industry registered a growth of 7.6%, supported by growth in both passenger cars and utility vehicles.

Our International market presence spans across several countries in Europe, Africa, the Middle-east, Southeast Asia, South America, Australia, CIS and Russia. The

subsidiaries and associate companies have helped company to expand its operations to UK, South Korea, Thailand, South Africa and Indonesia.

This year Mr. Guenter Butschek was appointed as the New Managing Director of TMLwith effect from February 15, 2016. Mr Butschek graduated in Business Administration and Economics with a diploma from the University of

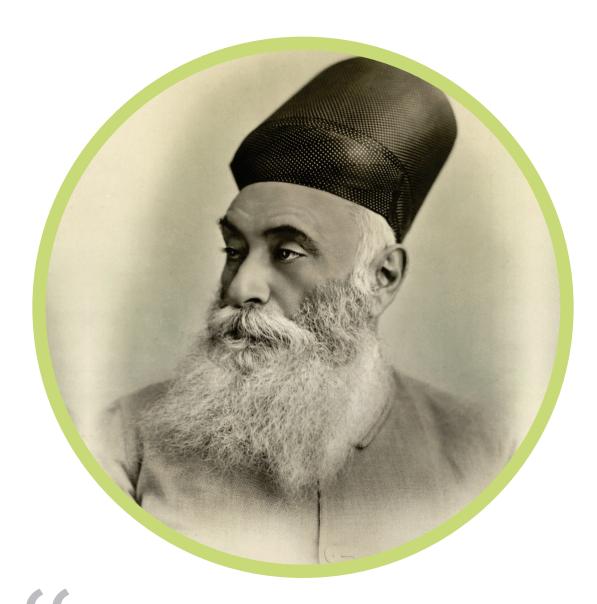
Cooperative Education Stuttgart, Germany. Mr. Butschekhas more than 25 years of experience in international automotive management, holding functions like production, industrialisation and procurement. He has rich global experience of growing organisations and in developing new markets.

#### Our performance at a Glance

Category	Industry Sales		Company Sales			Market Share		
	FY 2016	FY 2015	Growth	FY 2016	FY 2015	Growth	FY 2016	FY 2015
Commercial Vehicles	704,440	642,641	9.60%	326,755	317,780	2.80%	46.40%	46.40%
Passenger Vehicles	2,771,099	2,575,680	7.60%	127,118	136,653	-7.00%	4.60%	5.30%
Total	3,475,539	3,218,321	8.00%	453,873	454,433	-0.10%	13.10%	14.10%



# Our Business Philosophy



In a free enterprise, community is not just another stakeholder in business but is in fact the very purpose of its existence.

Founder, Jamsetji Tata (1839-1904)

# From the Desk of CEO & Managing Director



There are multiple challenges before us, from global competition to climate change, supply chain sustainability to urban air quality concerns. In such complexities, Inclusivity and Innovation are the keys to sustainability. Inclusivity to stakeholder's expectations and innovation to deliver sustainable mobility solutions!

Dear Stakeholders,

I am delighted to present you the Twelfth edition of our annual Sustainability Report'Towards Tomorrow'.

The report explains our performance towards the Triple Bottom Line covering Economic, Environmental and Social aspects. The contents of this report have been aligned with the globally accepted Global Reporting Initiative (GRI) framework and follows the latest iteration G4 of the same.

The year gone by has brought positive news for India with robust GDP growth, making the nation one of the fastest growing economies worldwide. India is in the midst of a paradigm shift in the way people commute as private and commercial users of transportation are increasingly adopting alternate public modes of transportation.

FY 2015-16 has been a year of recovery for Tata Motors with focus on introducing exciting mobility solutions, keeping customers central to our plans. With deep insight into customer needs, we constantly innovated across passenger vehicles and our renewed focus in the passenger vehicles business has helped provide a wide portfolio of products. We are also recapturing the customer mind space which is helping us to strengthen our brand positon in the passenger vehicle market. We have formulated a new strategy to enhance quality and customer experience which has improved our rank in J.D Power

Survey both for customer service (3rd rank) and Initial Quality score (rank 7th from 12th a year back) for our passenger vehicles. The launch of the new mid-segment hatchback Tiago, has been well accepted in the market. We look forward to bringing more disruptive and exciting new offerings for our passenger vehicle customers.

In the Commercial Vehicle business, we pride ourselves as the country's largest Commercial Vehicle manufacturer, with one of the most extensive range in the world, constantly innovating and defining the market, with new technologies and categories. We are geared to further strengthening our market leadership and are committed to striking the right balance between sustainable growth and profitability. We aim to be among the top 3 in the world by FY 19 and we will continue to focus on adding value to our customers through safety, enhancements in productivity and economy of their operations.

We are gearing up to comply with new and current regulations and government policies regarding increased fuel economy, reduced greenhouse gases and exhaust emissions along with vehicle safety as part of future strategy.

The community development agenda at Tata Motors is strategically tied to competencies and business needs of the organisation while working on areas that matter the most for communities. Health, Education, Employability (also livelihood) and Environment continue to be core focus areas of the community development agenda. Through the Affirmative Action (AA) initiative, we strive to develop and deliver initiatives focused towards upliftment of certain disadvantaged sections of the society.

Climate change is a global concern and in order to minimise the impact resulting from our business activities, we have implemented a Climate Change Policy. We are working towards developing cleaner and more efficient vehicles, reducing environmental impacts of manufacturing operations, and building awareness among stakeholders. Our aim will not be just to comply with the emerging regulations but be ahead of the requirements.

In order to ensurewe are aligned to current and future safety and environmental norms we have scaled up our investments to upgrade our production facilities with latest emissions controls and efficient technologies while also taking up reduction targets as part of our sustainability agenda. Our Advanced Research group is working on various alternate fuel technologies like electric vehicles, hybrid vehicles and fuel cell technologies. This is prioritized based on latest competitive analysis in the new

technology areas and our innovation strategy. We have adopted a Life Cycle Assessment as a proven and timetested decision-making tool to better understand the environmental footprint of our products across the value chain and identify hot-spots as well as opportunities for improvement.

I am also delighted to share that we have bagged a order of 25 Diesel Hybrid electric buses from Mumbai Metropolitan Region Development Authority (MMRDA) for the Ultra Electric Bus, the first fully electric bus from Tata Motors.

Energy is a material issue for our manufacturing plants and renewable energy is a key focus area from a cost and a climate change perspective. Apart from sourcing wind power we are also utilizing existing rooftop areas for inhouse solar power generation. Energy conservation continues to be a key focus area from a cost and a climate change perspective.

We also closely work with our suppliers on enhancingtheir sustainability initiatives and focus on their capability and development. Project Sankalpwhich started in FY 14-15 has actively worked towards Supplier transformation with a focus on a 6 pillar approach of Cleanliness, Safety, Health and Hygiene, Data Management, Quality, Supplier issue resolution.

To summarize, Tata Motors is committed to improving the quality of life of communities and its stakeholders. The year gone by has commenced transformation and paved way for our transition towards becoming a 'FutuReady' organization with the Mission, "to innovate mobility solutions with passion to enhance quality of life" of our stakeholders. A journey to leverage our global resources to develop differentiated and wide-range of commercial and passenger vehicle offerings.

With the foundation of its rich heritage, Tata Motors today is etching a refulgent future – 'Towards Tomorrow'. I would like to express my gratitude to all the stakeholders for being part of our sustainability journey. Your views and suggestions on the report are important to us and we welcome your feedback.



**Guenter Butschek** *CEO and Managing Director* 

# Corporate Governance

Responsible and lawful conduct is an integral part of corporate culture and fundamental to the success of any organization. Our philosophy on corporate governance is in line with the Tata group philosophy. We believe good corporate governance leads to effective decision making and it supports formation of robust operations, financial, risk and information management systems. We have been practicing the principles of good corporate governance over the years and have laid strong emphasis on independence, responsibility, transparency, professionalism, accountability and code of ethics to ensure adherence to the Tata ethos and value system.

We ensure that the Tata Code of Conduct (TCoC) is followed throughout the organization and every employee conducts himself / herself in an ethically acceptable way. It monitors aspects including anti-bribery, corruption, equal opportunities and human rights. TCoC serves as a guide to the Company, its directors and employees and is supplemented with an appropriate mechanism 'Whistle Blower Policy' to report any concern pertaining to nonadherence to the said Code.

We have grievance redressal mechanism in place to address Labour, Human Rights, Environment, Diversity & Equal Opportunity, Equal Remuneration and concerns raised are suitably closed and corrective actions are deployed.

An Organization Chart depicting the relationship between the Board of Directors, the Committees and the Senior Management functions as on March 31, 2016 is illustrated below:



#### **BOARD OF DIRECTORS**

#### **CEO & MANAGING DIRECTOR**

#### **BUSINESS COMMITTEES**

Commercial Vehicle business Unit Steering Committee

Passenger Vehicle Business Unit Steering Committee

Human Resource Management Committee

**Diversity Council** 

CV & PV Product Review Committee

DASC-Design and Styling Committee

Quality Review Management

Risk Oversight Committee

#### **EXECUTIVE COMMITTEE-EXCOM\***

Commercial Vehicle (ED)

Quality (ED)

Passenger Vehicles

Advanced and Product Engineering

Purchase & Supply Chain

**Group Chief Financial Officer** 

Chief Human Resource Officer

Corporate Strategy and Business Transformation

Corporate Committee\*\*

#### **BOARD COMMITTEES**

Audit Committee

Executive Committee of the Board

Nomination & Remuneration Committee

Stakeholders Relationship Committee

Safety, Health & Environment Committee

Corporate Social Responsibility
Committee

Risk Management Committee

Special need based Committees

#### **OTHER DIRECT REPORTEES**

Chief Internal Auditor

Company Secretary

Government Affairs

Corporate Legal

Collaboration & Imports

The Board of Directors at Tata Motors Ltd. comprises of eleven Directors of which eight are non-executive, including one Woman Independent Director. The Board, under the able guidance of Mr. Guenter Butschek (CEO and Managing director), periodically reviews the organizational policies, procedures and performance conducted by the Board.

For details regarding the composition of governance body, please refer to our Annual Report 2015-16.

The Board has constituted a set of Committees with specific terms of reference/scope to focus effectively on the issues and ensure expedient resolution of diverse matters. The Committees operate as empowered agents of the Board as per their Charter/terms of reference. Targets set by them as agreed with the management are reviewed periodically and midcourse corrections are also carried out. The Board of Directors and the Committees also take decisions by circular resolutions which are noted at the next meeting.

<b>Board Committees</b>	Functions
Audit Committee	The objective of the Audit Committee is to review the quarterly/annual financial statements before submission to the Board. The committee also reviews adequacy of internal control systems with the management, external auditor and internal auditor and recommends improvements to the management. For further details please refer page no 169-170 of Annual Report 2015-16.
Stakeholders' Relationship Committee	The Committee oversees and reviews statutory compliance relating to all security holders. It further considers and resolves the grievances of security holders of the company including complaints related to transfer of securities, non-receipt of annual report / declared dividends / notices / balance sheets. The Company has a designated email id: inv_rel@tatamotors.com for contacting the Compliance officer. For further details refer page no 172-173 of Annual Report 2015-16.
Nomination and Remuneration Committee	The Committee recommends to the Board the set up and composition of the Board and its Committees including the "formulation of the criteria for determining qualifications, positive attributes and independence of a director". For details of the remuneration of Directors, Key Personnel and Employees, please refer to Page 106 of Tata Motors Ltd. Annual Report 2015-16. For further details refer page no 170-172 of Annual Report 2015-16.
The Safety, Health and Environment Committee	The committee was constituted with the objective of reviewing Safety, Health and Environment practices. The Committee comprises of two Independent Directors and two Executive Directors. For further details refer page no 174 of Annual Report 2015-16.
The Ethics and Compliance Committee	The committee was constituted to formulate policies relating to the implementation of the Tata Code of Conduct for Prevention of Insider Trading (the Code), take on record the monthly reports on dealings in securities by the "Specified Persons" and decide penal action in respect of violations of the applicable regulations/the Code. For further details refer page no 170-174 of Annual Report 2015-16.
Corporate Social Responsibility Committee	The committee formulates and recommends to the Board, a CSR Policy which shall indicate the activities to be undertaken by the Company as specified in Schedule VII. The committee also recommends the amount of expenditure to be incurred on the activities referred to in clause (a) of the CSR rules. It also monitors the CSR Policy of the Company from time to time. For further details refer page no 174 of Annual Report 2015-16.
Risk Management Committee	The committee assists the Board in overseeing the Company's risk management process and controls, risk tolerance, capital liquidity and funding etc. and its periodic update thereof to the Board. It is also responsible for reviewing the Company's risk governance structure, assessment, practice, guidelines etc. The Committee comprises of 4 Independent Directors. For further details refer page no 174 of Annual Report 2015-16.

The Safety, Health and Environment (SHE) Committee has been constituted with the objective of reviewing Safety, Health and Environment practices. The terms of reference of the Committee include:

- to take a holistic approach to safety, health and environmental matters in decision making;
- to provide direction to Tata Motors Group in carrying out its safety, health and environment function;
- to frame broad guidelines/policies with regard to safety, health and environment;
- to oversee the implementation of these guidelines/ policies; and
- to review the policies, processes and systems periodically and recommend measures for improvement from time to time.

While SHE committee oversees the formulation of organisational approach and its effective deployment, responsibilities have been delegated to respective functions at every manufacturing location to ensure adoption of policies and guidelines. Further details are presented in "Occupational Health & Safety" section. The Committee comprises of 2 Independent Directors including the Chairman of the Committee and 3 Whole-

time Directors. During the year under review, one meeting of the Committee was held on August 7, 2015 wherein all the members were present at the said meeting.

Corporate Social Responsibility (CSR) Committee has been constituted by the Board in accordance with the Companies Act to:

- Formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the Company as specified in Schedule VII of the Act;
- Recommend the amount of expenditure to be incurred on the activities referred to in the above point; and
- Monitor the Corporate Social Responsibility Policy of the Company from time to time.

The CSR committee comprises of 2 Independent Directors and 2 Whole-time Directors. During the year under review, 3 meetings of the Committee were held. With respect to subsidiaries & JVs, the TCoC concerns are addressed through respective managements and audit committees. All major concerns are also reported to TML audit committee.

For details regarding the functioning of other committees listed above, please refer to our Annual Report 2015-16.

### Tata Motors Investors Relations team gets Asian Recognition

Tata Motors Investors Relations team got Asian Recognition at Institutional Investor 2015 All-Asia Rankings in the Autos & Auto Parts sector.

- First place in Best Investor Relations Companies Nominated by the Sell Side
- Best Analyst Days Ranking-Overall Second Place
- Chandrasekaran Ramakrishnan was awarded as the Best CFO at third place-Nominated by the Buy side
- Vijay Somaiya was awarded Best Investor Relations Professional at second place-Nominated by the Sell side



Chandrasekaran Ramakrishnan Group Chief Financial Officer



Vijay Somaiya VP & Head (Treasury & IR)



**TATA MOTORS** 

# Something doesn't seem right? Something doesn't feel right?

### **SPEAK UP!**

**ETHICS HELPLINE**: 1800 103 2931 www.speak-up.info/tatamotors

### **Ethics and Integrity**

The Company ensures compliance of ethical standards by its vendors and contractors through appropriate clauses in its work contracts to which they are obligated. Generally, the contract includes clauses in relation to Human Rights Protection, Corruption practices and other things related to ethics. Training and awareness on TCoC is provided to all employees and relevant stakeholders are also made aware of the same from time to time.

The Company also has a whistle blower mechanism, for ensuring confidentiality and protecting the whistle blower from any harassment/victimization. The policy covers instances pertaining to any unfair practice like retaliation, threat or intimidation of termination/suspension of service, disciplinary action, transfer, demotion, refusal of promotion etc. The Policy is directly monitored by the Chairman of the Audit Committee and the Chief Ethics Officer.

The Company has an ethics helpline where employees can place anonymous complaints against ethics violations.

Tata Motors
awarded by
Finance Asia
Magazine
- Best Company
Award from
the Investors in
March 2016.

The ethics helpline can be reached through ethics hotline number (1800 224440 / 022-2287 1839) or oral reports. Oral reports will normally be documented by the Chief Ethics Counselor/ Chairman of the Audit Committee accessing the voice mail by a written transcription of the oral report Written application to Ethics and compliance: All concerns can be reported to Chief Ethics Counselor/ Chairman of the Audit Committee in Hindi, English or any regional language.



#### Tata Code of Conduct

The Tata Code of Conduct (TCoC) was refreshed during FY 2015-16 and launched on Quality day 29th July, 2015 with an objective to make it more relevant to a global business environment. While it has remained unaltered in its essence, it has been amended over the years to stay aligned with changing cultural and regulatory norms across the multiple jurisdictions in which we conduct our business.

It explicitly references our group's values, and linked with our group's mission to improve the quality of life of the communities we serve globally through long-term stakeholder value creation, it clarifies the duties and responsibilities of Tata companies and colleagues in relation to these stakeholder groups.

TCoC accounts for all our stakeholders i.e. employees, customers, communities in which we operate, value chain partners, joint venture partners, financial stakeholders, government of companies in which

we operate and other group companies towards the effective implementation and adherence of the groups mission on environmental, labor practices, societal and code of conduct aspects. This Code sets out our expectations of all those who work with us. We also expect those who deal with us to be aware that this Code underpins everything we do, and in order to work with us they need to act in a manner consistent with it.

TML has an Ethics Framework in place in line with Tata Group values. This framework includes Board oversight of ethics programs and activities. As a part of reporting, the TML audit committee (Committee of the Board) agenda includes review of whistle-blower mechanism as well as status of TCoC concerns received & resolved.TCoC has been amended over the years to stay aligned with changing cultural and regulatory norms and also to match the needs and demands of the young dynamic force of the

> organization. Number of initiatives were performed for cascading and fostering the TCoC across the company which includes:

- Sensitization/ communication programs across locations including awareness sessions, video messages of ExCom members, introduction of web based training modules on TCoC etc.
- New policies on "Gifts & Hospitality" and " Anti-Bribery & Anti-Corruption" were



- Revitalization of "Conflict of Interest" policy
- Ethics helpline was established to promote transparency and ethical behaviour in our business and operations. This will offer easy accessibility for our employees as well as our value chain partners to report any ethical violations





Awareness Sessions on Refreshed TCoC

#### Concerns Received/Resolved by TML in FY 2015-16

	FY 20	15-16
TCoC Concerns	Concerns Received (Nos.)	Concerns Resolved (Nos.)
Employee Relations	10	10
Environment, Health& safety	0	0
Diversity, Equal opportunity & Respect in the work place	2	2
Sexual Harassment	7	7
Financial Impropriety	14	12
Legal Compliance	1	0
Unfair Business practices followed	23	20
Total	57	51

#### Ethical Concerns Received/Resolved by Subsidiaries in FY 2015-16

TCoC Concerns	TTL		TAL		TMLDL		TMML	
	Received	Resolved	Received	Resolved	Received	Resolved	Received	Resolved
Concerns other than Sexual Harassment	3	3	2	2	4	4	1	1
Sexual harassment	2	2	0	0	0	0	0	0
Total	5	5	2	2	4	4	1	1

### **Anti-Corruption**

Prevention of corruption and commitment to fair competition is one component of compliance efforts. TML has an Ethics Framework in place in line with Tata Group values. There have not been any incidents of corruption in FY 2015-16. Appropriate disciplinary action proportionate to the gravity of misconduct in line with the principles of natural justice is taken against the employees. We conduct regular trainings to all our employees on anti-corruption as per the TCoC for TML.

### **Regulatory Compliance**

Appropriate systems are devised to ensure compliance with the provisions of applicable laws and that such systems are operating effectively. "Legatrix" has been implemented which is an online compliance tool that help us to track and manage compliance of various regulatory and legal requirements. We comply with new and existing laws, regulations and policies regarding increased fuel economy, reduced greenhouse gas and other emissions, vehicle safety, taxes and pricing policies. We comply with regulatory requirements pertaining to emissions, safety, product labelling and other clauses of the Central Motor Vehicle Rules of India and Bureau of Indian Standards. The product and service information are in compliance with all the standards that govern us.

No monetary fines or non-monetary sanctions were levied on the Company by the Environment Regulatory Authorities in FY 2015-16. Every plant has a safety committee with equal representation from management and non - management employees. Government of India (GoI) legislation is followed with respect to forced and child labour and hence do not allow or encourage the same. Our established systems and procedures identify and comply with regulations pertaining to marketing communications. As a member of the Advertising Standards Council of India (ASCI) we follow its Code for Self-Regulation in Advertising and Marketing Communications. We communicate within the boundaries of 'Creative license' and none of our advertisements and promotions mislead in terms of claims and representations. We abstain from any kind of offensive alignment or anti-social content in our marketing communications. The National Fair Trade Regulator -Competition Commission of India (CCI) had initiated legal actions for alleged anticompetitive behaviour against 17 car manufacturers including Tata Motors. The matter is currently subjudice before the Delhi High Court which has stayed the penalty imposed by the CCI. There have not been any monetary or non-monetary sanctions for violations of regulatory norms regarding aspects of health and safety impacts of products and services; product and service information and labelling; marketing communications including advertising, promotion, and sponsorship; and provision and use of products and services. We also conduct voluntary 'product upgrade' drives to provide customers with upgraded components.

### **Management Systems**

Tata Business Excellence Model (TBEM) covers business aspects that range from strategy and leadership, to safety and climate change. The core values and concepts of TBEM include leadership, strategic planning, customer focus, measurement analysis and knowledge management, workforce focus, operations focus and business results. Our corporate governance philosophy is further strengthened with adherence to the Tata Business Excellence Model (TBEM) to achieve better performance and improve levels of efficiency in our businesses and sustainability initiatives.

Enterprise resource planning system, supplier relations management and customer relations management connect the company's different locations, dealers and vendors for reliable, consistent and accurate data exchange. To integrate our systems across the value chain to deliver better service quality, CRM-DMS (Customer Relationship Management – Dealer Management System) is initiated. CRM-DMS is a unique initiative, implemented through a centralized online system and deployed at all the Company's dealerships and offices across the country. This helps us integrate our systems across the value chain to deliver better service quality.

Business units and corporate functions address opportunities and the attendant risks through an institutionalized approach aligned to the Company's objectives through the enterprise risk management programme. This is facilitated by internal audit. The business risk is managed through cross functional involvement and communication across businesses

All our manufacturing divisions are certified for ISO 14001:2004 – Environmental Management System Standard and OHSAS 18001:2007 - Safety and Occupational Health Management System Standard. The Pune CVBU, Jamshedpur, Lucknow, Pantnagar, Dharwad and Sanand plants are also certified for ISO 50001:2011 energy management system standard. In order to ensure we have reliable and responsible suppliers for automotive production and service parts, we have mandated that all our suppliers adopt the ISO 9001/TS 16949 quality management system frameworks. We also encourage our dealers to adopt quality, environmental and safety management systems.

We have aligned our sustainability policy and initiatives

with the national and global frameworks such as National Voluntary Guidelines by Government of India and the United Nations' Sustainable Development Goals.

At TML, we have Risk Groups identified with clarity on Risk Owners and Risk Champions. This ensures that all areas are covered and ownership ultimately lies with the Group of ExCommembers.

As a part of annual exercise, the Risks were again reviewed during the current year. The Risks are supported with mitigation measures, KPIs, accountability and timeline. The effectiveness of process is obtained through risk awareness with all the Risk Owners and their driving initiatives to reduce residual scorers so as to reach target scores.

As a process, Risks identified by the business are compiled /segregated to identify top 30 risks with significant business impacts and high likelihood. Post discussion with ExCom members, top 12 Enterprise level Risks are identified for deliberations at Board level. Other Risks are monitored by concerned Risk Owners through their periodic reviews.

Based on the detailed exercise and interaction with ExCom members last year, top 12 Risks were identified. One of the top Risks is with respect to environment related to Diesel as a fuel option and emerging stringent Pollution Norms.

### **Public Policy Advocacy**

With a view to embed sustainability issues with the public policy, we are actively involved in advocating for a better policy framework. We partner with policy makers/industry associations and regulators on these issues through our representations in several industry and trade associations.

#### **List of Membership and Associations**

We actively participate in the following National Committees which are working on formulating policies and regulations for improvement of environment throughout the country.

We continually work with the steering committee of National Hydrogen Energy Board to find ways to harness hydrogen - potential energy of future. India is a signatory to the World Forum of United Nations of Economic Commission (UNECE) for Europe. Our experts are actively participating in the same for Harmonization of Vehicle Global Technical Regulations related to pollution control

and safety.

We, at TML actively participate in all WP29 UNECE group activities and prepare in advance for any emerging opportunities.

Mr. Ravindra Pisharody, Executive Director (Commercial Vehicles), has been elected as Vice President of Society of Indian Automobile Manufactures (SIAM). Similarly, we have representations in the following National Committeesas members which are working on formulating policies and regulations for improvement of environment including GHG reduction throughout the country;

- Standing Committee on Emissions (SCOE)
- Sub-committee on CO2 emission norms of Union Ministry of Shipping, Road Transport and Highways of India, along with Automotive Research Association of India (ARAI).
- Expert committee to define "Heavy Duty Vehicle Fuel Economy Norms for India under Ministry of Shipping, Road Transport and Highways of Government of India (GoI) & Petroleum Conservation Research Association (PCRA).
- Expert committee on Fuel Economy Labelling of Passenger Cars under Bureau of Energy Efficiency under Ministry of Power (Gol).
- Interministerial committee for upcoming emission norms (BSV, BSVI) for Motor Vehicles of Ministry of Shipping, Road Transport and Highways, Ministry of Heavy Industries, Ministry of Petroleum & Natural Gas (Gol).
- Working group on Quadricycle Emission Norms for India.
- Ministry of New & Renewable Energy, Gol, is promoting and assisting technology development for GHG reduction by way of increased usage of Biodiesel. We are engaged in this initiative of Gol and currently running number of engine and vehicle programs to commercialize usage of Biodiesel as soon as the same is made available to the general public by oil marketing companies.
- Working Group on Energy for Subgroup on DST's XIIth plan on Technology Development Program (TDP).
- National Electric Mobility Mission Plan We have been actively participating in forming hybrid performance criteria along with SIAM-FTG group and helped

government to launch FAME scheme. Now we are building two type of hybrid and electric vehicles under Technical Advisor Group under R&D scheme.

### Sustainability Risks and Opportunities

The automotive industry and the demand for automobiles are influenced by general economic conditions, rates of economic growth, credit availability, disposable income of consumers, interest rates, environmental and tax policies, safety regulations, freight rates and fuel and commodity prices.

#### (a) Economic Risks

Muted industrial growth in India in recent years along with continuing higher inflation and interest rates continue to pose risks to overall growth in the market. Furthermore, intensifying competition in the premium automotive categories could materially and adversely affect the Company's sales. Risk is associated with Company's automobile financing business in India. In Fiscal 2016, the market share of the Company's automobile financing business, which supports sales of the Company vehicles, declined to 23.0% from 24.0% in Fiscal 2015. Underperformance of the Company's distribution channels and supply chains, increase in input prices of raw materials and deterioration in the performance of any of the subsidiaries, joint may have a material adverse effect on the Company's sales, financial condition and results of operations.

#### (b) Social Risks

Private and commercial users of transportation increasingly use public modes of transportation other than the automobiles because of rising costs of automotive transport, increasing traffic density in major cities and environmental awareness. A shift in India's consumer preferences away from private automobiles would have a material adverse effect on the Company's general business activity and on its sales, financial position and results of operations as well as prospects. Obligations under the World Trade Organization agreement could reduce the present level of tariffs on imports of components and vehicles which could result in increased competition. Moreover, Company's business and operations could be materially and adversely affected by labour unrest. Other factors like terrorist attacks, civil disturbances, regional conflicts and other acts of violence may

Sustainability is about widening our focus from profits to planet & people. As an automobile manufacturer, we will continue to contribute in delivering sustainable transport solutions and make this world a sustainable habitat!



Mr. Ravindra Pisharody Executive director, Commercial Vehicle Business unit

disrupt or otherwise adversely affect the markets in which the Company operates, the Company's business and profitability.

#### (c) Environmental Risks

Customer preferences seem to be moving in favour of more fuel-efficient and environmentally-friendly vehicles. Increased government regulation, rising fuel prices, and evolving environmental preferences of consumers has brought significant pressure on the automotive industry to reduce CO2 emissions.

Compliance with new and current laws, rules, regulations and government policies regarding increased fuel economy, reduced greenhouse gas and other emissions and vehicle safety significantly increases the Company's costs and materially decrease its net income. In order to comply with current and future safety and environmental norms, the Company may have to incur additional costs to (i) operate and maintain its production facilities, (ii) install new emissions controls or reduction technologies, (iii) purchase or otherwise obtain allowances to emit greenhouse gases, (iv) administer and manage the Company's greenhouse gas emissions programme, and (v) invest in research and development to upgrade products and manufacturing facilities. If the Company is unable to develop commercially viable technologies or is otherwise unable to attain compliance within the time frames set by new standards, the Company could face significant civil penalties or be forced to restrict product offerings drastically. Compliance with the SEC's rules for disclosures on "conflict minerals" may be time consuming and costly as well as result in reputational damage.

#### **Opportunities**

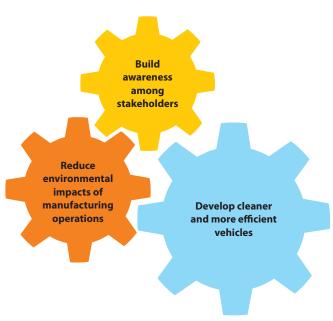
Sales of M&HCVs in India is expected to grow in line with the continuing trend toward the replacement of ageing fleet vehicles.

- New product launches in the coming year with innovative features, design and competitive pricing will better position the Company in new height. The Company is focusing on increasing its offerings in the defence sector from providing only pure logistics solutions to tactical and combat solutions.
- Growing wealth in rural markets in India also provides an opportunity to expand sales reach and volumes. The Company is focusing on reaching rural target market to address demand in rural markets in cost-effective ways.
- Certain non-vehicular products and services such as spare parts, after-sale services and annual maintenance contracts are also gaining popularity due to increased consumer awareness. The Company believes it is poised to address this growing need, thereby providing additional sources of revenue
- India has emerged as a major hub for global manufacturing with its advantage of lower input costs, availability of local supplier base and high domestic demand. As an established domestic manufacturer, the Company believes that is ideally placed to take advantage for targeting lucrative international markets, either through fully-built or complete knockdown exports
- In addition, the Company believes it has the advantage of strong in-house design and development facilities and professionals. Thus the Company believes that its research and development group is capable of developing solutions for different regulatory and emission norms in accordance with market demands in timely manner.

## Mitigating Climate Change related

At TML, risks and opportunities are prioritized based on frequency of occurrence, potential of recurrence and its history of occurrence. Also, risks and opportunities are analysed on their potential impact to the company and their external influence. Potential impacts are measured by a number of variables including reputation, operation, revenue etc. With regard to climate change, risks and opportunities vary from government regulations to supply chain disruption. These are prioritized differently based on frequency of occurrence, time to respond, impact and external influence.

We have adopted the Tata Group Climate Change Policy to channelize our efforts in mitigating and adapting to



Three fold Approach towards Climate Change Action

climate change. We have developed action plans in line with this policy for our PVBU and CVBU operations. Our approach towards climate change mitigation and pursuing low carbon growth is three-fold.

For operational efficiency, opportunities are driven through ENCON initiatives and 'Variable Conversion Cost' which looks into the efficiency of variable energy components of processes. This is prioritized based on cost and efficiency. On the opportunities part, our Advanced Research group is working on various alternate fuel technologies like electric vehicles, hybrid vehicles and fuel cell technologies. This is prioritized based on latest competitive analysis in the new technology areas and our innovation strategy. Our products are designed to deliver superior fuel efficiency for customers and thereby result in reduction of environmental impact during use phase.

# Alignment with Sustainable Development Goals (SDGs)

The adoption of the Millennium Development Goals (MDGs) significantly changed the discourse on development from a focus solely on macro-economic growth to one based on improvements in the quality of life for poor persons. Having formally recognized the imperative to make poverty reduction the focus of world efforts, the Millennium Development Goals also created a unifying international agenda. As the Millennium Development Goals come to an end in 2015, global poverty has been more than halved and there has been important progress across all the goals.

The UN Conference on Sustainable Development (Rio+20), in June 2012 laid down the foundation stone of Sustainable Development Goals where UN Member States worked to create follow on from the Millennium Development Goals. A final document was adopted at the UN Sustainable Development Summit September 25–27, 2015 in New York, USA. The title of the agenda was Transforming our world: the 2030 Agenda for Sustainable Development which will form the blueprint for development policy and funding. It is a set of goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years.

19

**Corporate Governance** 



**Arvind Bodhankar** Chief Sustainability Officer

Over the last few decades, the world has seen societal issues not only persist but grow. We at Tata Motors, are committed to align our business practices with the SDGs, in line with our rich ethos of building businesses responsibly and improving the quality of life of communities we serve globally. Sustainability is an action, not fashion, nor any jargon!







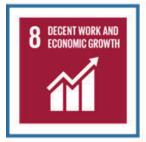
































The Sustainable Development Goals takes forward the Millennium Development Goals which addresses the issues of poverty, hunger, universal health coverage, universal primary education, universal access to modern energy services, sustainable cities, fighting climate change, protecting marine and terrestrial ecosystems and the universal need for development that works for all people. The Sustainable Development Goals agenda is to help promote social policies that affect how resources are employed and distributed. They will provide a framework for the monitoring of socio-economic performance and a tool for mobilising resources for sustainable development.

Protecting the planet is a shared responsibility where every entity be it Government, Large Conglomerates, NGO's or citizens of the country, all should come up and take forward the agenda of sustainable development. All stakeholders should work together to achieve the Sustainable Development Goals and make our planet a better place.

Private sector contributions can take two main forms; good governance in business practices and investment in sustainable development. This includes the private

sector's commitment to sustainable development; transparency and accountability in honouring sustainable development practices; responsibility to avoid harm, even if it is not prohibited; and partnership with government on maximizing co-benefits of investment. The automotive industry consumes a tremendous amount of materials, including steel, plastic and aluminium to make products therefore it becomes pertinent on their part to contribute to society and planet in a positive manner.

The UN SDG agenda has 17 measurable and quantifiable goals. Out of this, Tata Motors Limited is working on 15 goals which are strategically aligned with the Tata Group philosophy as well as business priorities. The graphic demonstrates the alignment of Tata Motors' Sustainable development framework with the SDGs. Tata Motors will continue to work on Sustainable Development Agenda 2030 by offering sustainable mobility solutions, building fuel efficient vehicles meeting the stringent emission measures, eliminating wastes, maximizing resource use efficiency, influencing suppliers to improve environmental &working conditions and transitioning towards a circular economy model.



# Stakeholder Engagement

Stakeholders play an important role in the success of our organization and hence their perspectives are of extreme importance. We recognize all those individuals and/or groups who are affected by our business activities or those who have the power and influence to affect our business as our stakeholders.

To achieve our goal of meaningful engagement with stakeholder, we encourage adopting formal stakeholder engagement which means the process by which people who may be affected by the decisions or can influence the implementation of its decisions are involved. Sustainability performance is discussed by engaging with stakeholders formally and informally which helps in ensuring business sustainability as well. Our approach towards identification and prioritisation of stakeholders is based on the time-tested values of Tata Group along with our business approach.

Formulation of strategy for achieving sustainability is shaped by stakeholder's views, concerns and key expectations. The discussions through stakeholder engagement provide us with an insight into emerging issues important for our stakeholder groups and to our business and ideas for solutions to address these issues.

A detailed process of stakeholder engagement is done once in three years to understand concerns and expectations of varied stakeholders in detail. Stakeholder groups involved in this direct and detailed consultation included our employees, communities, suppliers, opinion leaders (road safety experts), media, customers, investors and shareholders, government authorities, dealers and service stations. This helped us in identifying the critical issues and hasenabled us to focus on the topics that are of utmost importance to our stakeholders.

We have multiple communication/engagement channels, which provide us with valuable feedbacks which are incorporated in our business decision and results of which are shared openly. We evaluate a variety of sources in order to obtain a precise picture of our stakeholders concerns. This involves evaluating reader feedback, customer and employee surveys, specialist unit workshops and dialogs with individual stakeholder groups.



Stakeholder Engagement at TML							
Stakeholder Groups	Engagement Mechanisms	chanisms Frequency of engagement Key concerns		Feedback assessment			
Employees	Sunrise and Sunset meetings; Horizontal Communications; Horizontal deployment; Weekly/Monthly reviews improvements Displays; HR Forum; Q12 Tool; Skip Level Meets; Town Halls; Focused Group Discussions	Annual; Quarterly; Monthly; Weekly	Communicating policy decisions and seeking feedback; communicating performance; Media Reports, Labour Issues	Employee satisfaction survey; Appraisals; Internal Surveys			
Communities	Meetings with local community; public hearing	Quarterly; Daily	Community development initiatives communication; capturing societal concerns  Minutes of meeting; actio feedback letters				
Suppliers/ Service Providers	Technology Days, Supplier meets, Joint programmes, Kaizen events, Participation in NPI, Competitor data and analysis; Vendor Council; Vendor mentoring	Annual; Quarterly	Delivering quality products; time management; compliance to Tata Motor's code of conduct and other policies;	Vendor rating; Board reviews; Vendor Satisfaction Surveys			
Opinion Leaders	One-to-one meetings	Need based	Following the regulations, complying with the industry standards	Minutes of meeting, action plans			
Media	Regular interactions	Ongoing	Communicating company's performance and seeking feedback	Minutes of meeting, action plans			
Dealers and Service station	Dealer meets, Joint programmes, Kaizen events, Participation in QFD and NPI, Competitor data and analysis, Special training Programmes; Dealers Council; Dealervisits; Audits	Annual; Quarterly; Daily	Building capacity and technical know-how; improving and delivering better response to customers;	Dealer Satisfaction Survey			
Customers	Customer meets; Key account process; Surveys; Feedback calls; Training Forums; DirectVisits	Need based	Understand product feedback; redress complaints; suggestions on product development;	Customer Satisfaction Index; JD Power Survey			
Investors and Shareholders	Investor meets; Investor calls; Road Shows, Shareholder / Investors Grievance Forum, Ethics Committee	Annual; Quarterly; Need based	Financial performance; broad future strategies; feedback and addressal of concerns	Minutes of meeting; action plans			
Government Authorities	One-to-one meetings; Meetings in Industry Forums	Need based	Relationship building; appraising the government on industry constraints; discussions on way forward	Minutes of meeting; action plans			



# Materiality Assessment

Compassion and Materiality is the crux of Sustainability. We at Tata motors, are compassionate for the environment and take decisions which directly or indirectly have a positive impact on our ability to preserve environment and create social values for stake holders & for the society at large.



Satish Borwankar Executive Director, Quality

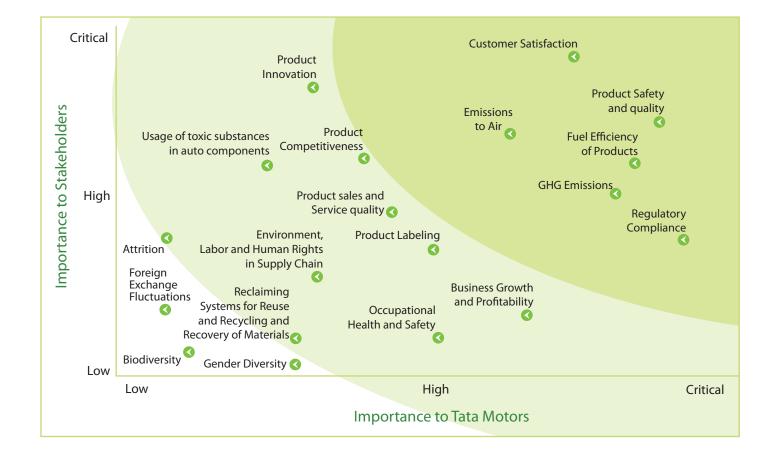
We use materiality assessment to determine the priority of issues on the basis of their impact on the business and the importance of these issues from the perspective of stakeholders. Materiality may be defined as a threshold beyond which sustainability topics become important enough to be reported. While we report our sustainability performance on an annual basis, materiality assessment is conducted once every three years. During FY 2014-15, we conducted a comprehensive materiality assessment to identify and prioritize key sustainability issues from the stakeholders and business perspective. This assessment was based on the Reporting Principle and Guidance for Defining Content in the G4 Sustainability Reporting Guidelines

Materiality assessment process adopted by TML is as follows:

- 1. Identification of aspects relevant to the company through various channels.
- 2. The assessment was against six materiality filters of financial impacts and risks, legal drivers, internal policy drivers, peer performance, stakeholder concerns and opportunity for innovation with inputs from the senior management.
- 3. The assessment process gathered inputs from the all

- the stakeholders through focused discussion and questionnaires.
- 4. Aspects relevant to TML were categorized based on different criteria - impact on business, feedback received from stakeholders
- These criteria were then measured on a criticality scale (as shown in the materiality matrix below) which help isolate and prioritize the key material aspects
- 6. Following prioritization, the material aspects were reviewed by TML senior management and are considered while making strategic decisions.

The matrix below is a representation of the outcome of our materiality assessment. Aspects have been rated on a scale of low, high and critical and rated for the importance to business and importance as perceived by the stakeholders. For each material aspect, the mapping to GRI aspect along with reporting boundary for TML as well as the subsidiaries has been presented. The reporting boundary for each material aspect has been defined from the materiality assessment as well as decision by the management. Subsequent sections present the management approach, monitoring mechanisms and performance indicators for the aspects.



# Aspect Mapping Table

Material Issues         Material Aspects (GRI GA)         Indicates (GRI GA)         Within Organisation organisation         TAL         TMIDL			Domoutod	TML			Subsidiaries		
Business Growth and Profitability   Economic Performance   G4-EC1   G4-EC2   G4-EC3   G4-EC3   G4-EC4   G4-EC3   G4-EC3   G4-EC3   G4-EC4   G4-EC3   G4-EC	Material Issues	Material Aspects (GRI G4)	Reported Indicators (GRI G4)			TAL	TMLDL	TMML	TTL
Economic Performance	Economic								
Economic Performance	Business Growth and Profitability		C4 FC1						
G4-EC3   G4-EC4   G		_							
G4-EC4	Foreign Exchange Fluctuations	Economic Performance							
Environment									
Fuel Efficiency of Products   Energy	Environment								
Fuel Efficiency of Products			G4-EN3						
G4-EN6   G4-EN7   G4-EN1   G4-EN12   G4-EN13, G4-EN14   G4-EN15   G4-EN15   G4-EN16   G4-EN16   G4-EN16   G4-EN16   G4-EN16   G4-EN16   G4-EN19   G4-EN19   G4-EN19   G4-EN19   G4-EN19   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN29   G4-EN21   G4-EN21   G4-EN29   G4-EN21   G4-EN24			G4-EN4						
Biodiversity   Biodiversity   G4-EN13, G4-EN14	Fuel Efficiency of Products	Energy							
Biodiversity									
Emissions to Air   G4-EN15   G4-EN16   G4-EN16   G4-EN16   G4-EN17   G4-EN18   G4-EN18   G4-EN19   G4-EN			G4-EN7						
Cat-EN15   Cat-EN16   Cat-EN16   Cat-EN16   Cat-EN18   Cat-EN18   Cat-EN18   Cat-EN18   Cat-EN18   Cat-EN19	Biodiversity	Biodiversity							
GHG Emissions         Emissions         G4-EN17         G4-EN18         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Emissions to Air		G4-EN15						
GHG Emissions         Emissions         G4-EN17         G4-EN18         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0									
GHG Emissions         G4-EN19         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0									
G4-EN19   G4-EN20   G4-EN20   G4-EN20   G4-EN20   G4-EN20   G4-EN20   G4-EN20   G4-EN20   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN29   G4-EN29   G4-EN23, G4-EN33, G4-EN33, G4-EN34		Emissions							
G4-EN20   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN21   G4-EN22   G4-EN23   G4-EN23, G4-EN33, G4-EN33, G4-EN33, G4-EN34, G4-EN34	GHG Emissions								
Regulatory Compliance   Compliance   G4-EN21									
Regulatory Compliance         Compliance         G4-EN29         Image: Compliance of Compliance of Care Supply Chain of Care Supply Care Supply Chain of Care Supply Care Supp									
Environment, Labor and Human Rights in Supply Chain   Supply Chain   G4-EN32, G4-EN33, G4-EN34   Supply Chain   G4-EN34   G4	Regulatory Compliance	Compliance							
Rights in Supply Chain         Supply Chain         G4-EN34									
Attrition         Employment         G4-LA1         G4-LA2         G4-LA2         G4-LA3		Supply Chain							
Gal-Lat   Gal-	Social								
Gender Diversity  Employment  G4-LA2  G4-LA3  G4-LA3  Occupational Health and Safety  Occupational Health and Safety  Occupational Health and Safety  G4-LA6  G4-LA7  G4-LA7  G4-LA7  G4-LA8  G4-LA7  G4-LA8  G4-LA12  Society  Local Communities  Anti-Competitive Behaviour  Product Safety and Quality Product Competitiveness Product Competitiveness Product Innovation  Customer Satisfaction  Reclaiming Systems for Reuse and Recycling and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  G4-PR4  G4-PR4  G4-PR4  G4-PR4  G4-PR3  G4-PR3  G4-PR4  G4-PR4  G4-PR4  G4-PR4  G4-PR4  G4-PR4  G4-PR4	Attrition		G4-LA1						
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Occupational Health and Safety  Occupational Health and Safety  After Society  Society  Local Communities  Anti-Competitive Behaviour Product Safety and Quality Product Competitiveness Product Innovation  Customer Health & Safety  Product Safety and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  Occupational Health and Safety  G4-LA6 G4-LA7 G4-LA8 G4-SO1 G4-SO2 G4-SO1 G4-SO2 G4-SO2 G4-PR1 G4-PR1 G4-PR2 G4-PR1 G4-PR2 G4-PR3 G4-PR3 G4-PR3 G4-PR3 G4-PR4 G4-PR	Gender Diversity								
Occupational Health and Safety  Occupational Health and Safety  Affect  G4-LA7  G4-LA8  G4-LA12  Society  Local Communities  C4-SO1  G4-SO2  Anti-Competitive Behaviour  Product Safety and Quality Product Competitiveness Product Innovation  Customer Health & Safety  Reclaiming Systems for Reuse and Recycling and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  Occupational Health and Safety  G4-LA7  G4-LA8  G4-LA12  G4-SO1  G4-SO2  G4-SO7  G4-PR1  G4-PR1  G4-PR2  G4-PR3  G4-PR3  G4-PR3  G4-PR4									
Occupational Health and Safety  Safety  G4-LA7  G4-LA8  G4-LA12  Society  Local Communities  Anti-Competitive Behaviour  Product Safety and Quality  Product Competitiveness  Product Innovation  Customer Satisfaction  Reclaiming Systems for Reuse and Recycling and Recovery of Materials  Product Sales and Service Quality  Use of Toxic Substances in Auto components  Occupational Health and Safety  G4-LA7  G4-LA8  G4-LA9  G4-LA9  G4-LA9  G4-LA9  G4-LA9  G4-LA9  G4-LA9  G4-LA9  G4-LA9  G4-SO1  G4-SO2  G4-SO2  G4-PR1  G4-PR1  G4-PR2  G4-PR3  G4-PR3  G4-PR3  G4-PR3  G4-PR3  G4-PR4									
Society  Local Communities  Anti-Competitive Behaviour  Product Safety and Quality  Product Competitiveness  Product Innovation  Customer Satisfaction  Reclaiming Systems for Reuse and Recycling and Recovery of Materials  Product Sales and Service Quality  Use of Toxic Substances in Auto components  Auto components  Society  G4-LA12  G4-SO1  G4-SO1  G4-SO2  G4-SO7  G4-PR1  G4-PR1  G4-PR2  G4-PR3  G4-PR3  G4-PR3  G4-PR3  G4-PR4  G4-PR4	Occupational Health and Safety								
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Society  Local Communities  Anti-Competitive Behaviour  Product Safety and Quality Product Competitiveness Product Innovation  Customer Satisfaction  Reclaiming Systems for Reuse and Recycling and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  G4-SO7  G4-SO7  G4-PR1  G4-PR1  G4-PR3  G4-PR3  G4-PR3  G4-PR3  G4-PR3  G4-PR4									
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Product Competitiveness Product Innovation  Customer Satisfaction Reclaiming Systems for Reuse and Recycling and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  Customer Health & Safety  G4-PR1  G4-PR2  G4-PR3  G4-PR3  G4-PR3			G4-S07						
Product Competitiveness Product Innovation  Customer Satisfaction  Reclaiming Systems for Reuse and Recycling and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  Customer Health & Safety  G4-PR2  G4-PR3  G4-PR3  G4-PR3			G4-PR1						
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Reclaiming Systems for Reuse and Recycling and Recovery of Materials Product Sales and Service Quality Use of Toxic Substances in Auto components  G4-PR3  G4-PR3  G4-PR3  G4-PR3			G4-PK2						
Use of Toxic Substances in Auto components G4-PR4	Reclaiming Systems for Reuse and Recycling and Recovery of Materials		G4-PR3						
	Use of Toxic Substances in	Labelling	G4-PR4						
			G4-PR5						

### **Economic Performance**

The global macroeconomic landscape in FY 2015-16 was rough and uncertain and characterized by weak growth of world output. The situation was exacerbated by declining prices of a number of commodities, turbulent financial markets and volatile exchange rates. The US economy growth was stronger than expected with accompanying job growth, resulting in the decline in the unemployment rate. Some of the key concerns that have significant impact on our industry are the increased geopolitical uncertainty couples with some signs of economic slowdown in China.

#### **Indian Scenario**

India has registered a robust and steady pace of economic growth in FY 2015-16as it did in Fiscal 2015. India's GDP for FY 2015-16 increased by 7.6% compared to 7.2% in Fiscal 2015. Growth in agricultural and industry increased by 1.1% while service sector growth increased by 9.2%. The manufacturing sector showed a growth of 2%, electricity services increased by 5.6% in Fiscal 2016. During Fiscal 2016, there was a robust and steady pace of economic growth in the geographical markets in which the Tata and other brand vehicle segment has operations. The Indian automobile industry experienced an increase of 8.0% in Fiscal 2016, as compared to 2.4% in Fiscal 2015. Falling crude oil prices, lower inflation, resumption of manufacturing and mining activities, and lower interest rates appear to be helping the Indian auto industry. However, competitive pressures continued across all major products in the Tata and other brand vehicles segment leading to a marginal decrease in vehicle sales volumes.

#### **Our Performance**

India is the primary market for Tata and other brand vehicles (including vehicle financing). During Fiscal 2016, there was a robust and steady pace of economic growth in the geographic markets in which the Tata and other brand vehicles segment has operations.

1. Falling crude oil prices, lower inflation, resumption of manufacturing and mining activities, and lower interest rates helped Indian auto industry but competitive pressures continued across all major products in the Tata and other brand vehicles segment leading to a marginal decrease in vehicle sales volumes. The Company's overall sales of Tata and other brand vehicles decreased by 0.8% to 520,511 units in Fiscal 2016 from 524,522 units in

- Fiscal 2015, however, the revenue (before intersegment elimination) increased by 12.8% to ₹497.43 billion during Fiscal 2016, compared to ₹441.18 billion in Fiscal 2015, due to a better product mix, primarily due to relatively more sales of M&HCVs as a proportion of overall sales in Fiscal 2016 compared to Fiscal 2015.
- 2. During Fiscal 2016, sales in the domestic CV industry registered a growth of 9.6% in volumes, in comparison to a decline of 8.4% in Fiscal 2015. The recovery was driven by the continuation of demand in case of M&HCV (Trucks), fleet expansion by various State Regional Transport Undertakings and pickup in demand from the mining and construction related sectors. In addition, the industry also benefitted from the implementation of BS-IV emission norms, which became mandatory across North India and some nearby regions starting in October 2015. The year also witnessed mandatory implementation of Anti-Lock Braking Systems in M&HCVs and Uniform Bus Body Code in buses.
- 3. Sales in the passenger vehicles industry in India increased by 7.6% in Fiscal 2016, primarily attributable to reduced fuel prices, improved consumer sentiments, and lower interest rates. The Company's passenger vehicle sales in India decreased by 7.0% to 127,118 units in Fiscal 2016 from 136,653 units in Fiscal 2015, due to fewer new product offerings by the Company as compared to its competitors.
- 4. Industry sales of commercial vehicles increased by 9.6% to 704,440 units in Fiscal 2016 from 642,641 units in Fiscal 2015. Industry sales in the medium and heavy commercial vehicle segment increased by 30.3% to 302,532 units in Fiscal 2016, as compared to sales of 232,113 units in Fiscal 2015 primarily due to replacements of fleet vehicles, lower diesel prices, higher quantities of cargo transported, a renewal of mining activities in the states of Karnataka and Goa, renewal of construction activities, and expectations of increased investments in infrastructure and manufacturing. Industry sales of light commercial vehicles reported a decline of 2.1% to 401,908 units

in Fiscal 2016, from 410,528 units in Fiscal 2015, mainly due to lower freight transportation needs, financing defaults and tightened lending norms.

Total expenditure on CSR activities in FY 2016 was ₹0.21billion which was higher than ₹ 0.19billion expenditure in FY 2015.

Operating & other Costs for FY 2015-16 includes ₹ 0.21 billion spent towards various schemes of Corporate Social Responsibility (CSR) as prescribed under Section 135 of the Companies Act, 2013. No amount has been spent on construction / acquisition of an asset of the Company. The prescribed CSR expenditure required to be spent in FY 2015-16 as per the Companies Act, 2013 is Nil, in view of average net profits of the Company being Nil (under section 198 of the Act) for last three financial years.

The present value of defined benefit plan obligations for the year 2015-16 stood at ₹7.53 billion. These are met by plan assets whose value at the end of the year 2015-16 is estimated to be ₹6.65billion. This estimate has been arrived at on the basis of independent actuarial evaluation. Contributions towards defined benefit plan obligations are made by TML as per the regulatory requirements.

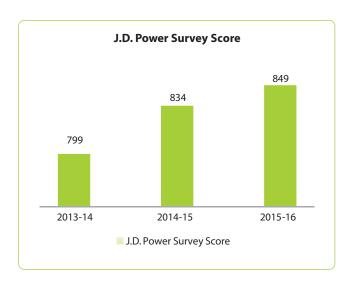
The organization currently benefits from excise duty exemptions for manufacturing facilities in the State of Uttarakhand and other incentives such as subsidies or loans from states where the Company has manufacturing operations. Further details are on Page 128 of TML Annual Report 2015-16.

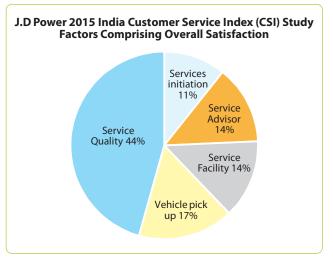
Economic Performance Table							
Economic performance (in ₹ billion)	2013-14	2014-15	2015-16				
Economic value generated	415.91	414.13	487.80				
Gross revenue	415.91	414.13	487.80				
Economic value distributed	427.85	449.61	483.08				
Operating costs	342.77	367.6	393.29				
Employee benefits and wages	28.78	30.91	30.27				
Payments to providers of capital	20.05	16.12	15.54				
Payments to government	36.26	34.98	43.98				
Economic value retained	-11.94	-35.48	4.72				
Community Investments	17.33	18.62	20.57				

# **Customer Centricity**

Customer centricity is intrinsic to our culture – develop, deliver, delight. We continuously strive to provide best services to enhance our customer engagement. Customer service quality is met through integration of our Customer Relationship management and Dealer Management System (CRM – DMS).

It is important to understand customers' expectations and thus an ongoing dialogue with customers is maintained through feedback surveys. It helps us to advance in the quality of products we develop. In view of providing consistent service, we have integrated feedback systems across the life cycle stages of customer satisfaction. We have benchmarked our performance with the industry peers by using J.D. Power Survey. The survey is a street recruitment and face-to-face interviewdone from May to August every year over a spread of 30 cities. The survey sample are owners with 12-24 months of ownership and who have serviced their vehicle atleast once in the last 6 months. We have improved our J.D. Power Survey score for passenger vehicles to 849 in 2015 from 834 for 2014. Testimony to our concerted efforts, we have moved up to third rank in the industry in the JD Power Customer Satisfaction Index in India. There have been no cases of non-compliance or violation from our customer end.





The data security of our customers is ensured through a robust consumer privacy policy which tracks and measures key aspects of customer dissatisfaction. All the complaints are assessed for root cause analysis through the Complaint Management Process. We have a daily dashboard shared with the regional teams where Turn Around Time (TAT) adherence is measured along with closure percentage and ageing of open complaints. There is a mechanism in place to internally escalate complaints to various members of the process chain if a complaint remains open beyond TAT. We drive closure of complaints from dealers end on the same day or the very next day with customer and this number is also monitored daily. Daily

tracking of complaints are escalated to the Chairman, President and Managing Director offices till closure of the complaint. If there are any complaints open for a long duration the same is investigated by the CE team and resolution intervention offered wherever required/possible. Monitoring of key performance metrics (CPTV, TAT adherence and Same Day Closure) is done by customer experience. Details of resolution, root cause analysis and service load based analysis and performance is tracked by the customer support team. We provide feedback to the customers on the resolution of the complaint.

Sustainability is about going beyond regulations & fences and minimizing ecological & social impacts of complete value chain including that of products and services. Keeping up the Group tradition & values, Tata Motors is committed to serve communities by offering sustainable mobility solutions and contribute to the nation building.



**Mayank Pareek** President-Passenger Vehicle Business

#### 1 Billion DTC Kilometres

TMLhave completed 1 billion kilometer with Delhi Transportation Corporation (DTC) in 7 years and have earned over 1 billion. TATA has a wide network of 2682 buses which operate from 22 bus depots across New Delhi and carry over 30 lakh passengers every day. TATA buses comprising of low and semi floor types cover 4.70 lakh kilometer daily with a fleet availability of 96%.



The Company is cognizant of the customer requirements and continually strives to innovate and improve its products and services accordingly. Tata Starbus Fuel Cell and Tata Ultra Electric Bus - World's first commercially produced CNG Hybrid Bus are zero pollution, zero noise BS IV complaint vehicles. Tata MAGIC IRIS ZIVA - a Gearless and clutch less vehicle is ideal for stop and go traffic conditions. Tiago - A Generation Next passenger vehicle has been Intelligently designed to incorporate 22 Utility Spaces. It also has a Smartphone enabled Turn By Turn Navigation App and unique rear parking sensors.

#### **Product Recall**

TML has a well-defined Recall Process which was reviewed & approved in principle by CSC members in Feb 15. The Recall Process has been framed based on global benchmark practices and recall related regulatory aspects of various countries.

The Recall Process is aimed at providing the frame work to address the vehicle recall due to Safety Defect in the vehicle due to design, manufacturing or assembly problem and possess undue risk to the safety of vehicle or

### **Product Innovation**

Sustainability is forward thinking! At product design & development stage, designers can anticipate & address environmental & social impacts of products over the life cycle; from sourcing – manufacturing – use – to end of life and develop sustainable products. With this precautionary approach, we are working on several product sustainability initiatives like; advance vehicles, efficient engine technologies, renewable materials, low GWP refrigerant air conditioners and so on.



**Dr Timothy Leverton**President and Head,

Advanced and product engineering

TML has always created value for the customer as a market leader in the Indian market. TML has played an active role in India's vision of sustainable mass transportation by developing viable and cost effective solutions including alternate fuel power trains. Supplying and maintaining Biggest CNG fleet of the world for Delhi since 2009 is a clear example of this intention. TML is developing a fleet of articulated buses with Janmarg to improve the mass transportation efficiency. This will be the first of its kind in India on a BRTS route.

TML has never limited its development of technologies based on the domestic market. It was the world's first to develop a CNG Series hybrid and supply to EMT, Madrid in Spain. TML has demonstrated its technology capabilities by and running the CNG parallel hybrid during the commonwealth games in Delhi in 2010. After the NEMMP initiative in India a Diesel version of the same Hybrid is under development to meet the order of MMRDA.

TML has a large range of products in its goods and passenger transportation portfolio. Different technologies are needed to support future targets on GHG. We are evaluating several xEV options through different technologies as part of its long term strategy. The technologies vary from mild hybrids in one segment to Fuel cell in others. TML has showcased the demonstrators in Auto expo from time to time.

We also engage with scientific and educational institutions to support our cause of technologies suitable for Indian context creating value to our customers.

We have the largest range of commercial passenger vehicles that supports the entire chain of mobility starting from LMPT (Last Mile Passenger Transport) to BRTS in urban transportation. The portfolio starts with IRIS which is a 4 seater, Vans covering upto 15 seater and a large range of buses with lengths as low as 6 m right upto 18 m. The portfolio is further customized to suit the requirements of different customers' school, staff, urban mass transport, Intercity transportation etc. The buses have been customized to ensure the need of mobility e.g BRTS buses have floor height matching the BRTS platform where as there are low floor buses as well enabling faster step-in and step-out time required in urban scenarios. The buses have been equipped with a host of ITS technologies integrating with efficient transportation systems.

Apart from this, we are working on LNG and Dual fuel technologies which provide an alternative to pure diesel technologies. We have showcased the LNG truck and 5L dual fuel in Auto expo.

During fiscal year 2016, TML filed 116 Patent Applications and 37 Design applications. In respect of applications filed in earlier years, 21 Patents were granted and 103 Designs were registered. Both filing and grant details include national and international jurisdictions

During the reporting period, there were no significant incidents of non-compliance related to health & safety impacts of products or those related to product labelling.

At TML there are several initiatives to develop alternate fuel vehicles which reduce the impact of vehicles on the air pollution as well as climate change. A list of the major initiatives is given below:

 TMLhas delivered 10 CNG Hybrid buses to the city of Madrid which are in operation since April 2013. From the fuel consumption data available for the period



April 2015 to December 2015, the 10 hybrid buses have consumed 110 tonnes CNG compared to 123 tonnes CNG consumed by equivalent conventional CNG bus in operation in Madrid. This works out to an annual savings of 17 tonnes of CNG fuel and about 48 tonnes CO<sub>2</sub> emissions.

- TML has won an order to deliver 25 Diesel Series Hybrid buses to the city of Mumbai, India to be operated in the city center of Bandra-Kurla Complex as well as for connecting BKC to the Airport. Once the fleet becomes operational by mid-2017, it is expected to save around 25% diesel fuel, with corresponding savings in Co<sub>2</sub>.
- TML is developing an electric bus based on the 9-m long bus platform which will result in zero tail-pipe emissions. The vehicle would be ideally used as feeder services to Metro rail and BRTS routes.
- TML is also developing an electric trolley bus based on the series hybrid platform targeted for BRTS routes for zero emission mass mobility application.

- Tata Motors is developing a fleet of fuel cell buses, again based on the series hybrid platform which can provide clean public transportation in cities where hydrogen infrastructure will be available.
- TML is developing electric vehicles based on small commercial vehicles like Tata Iris and Tata Magic, which are intended for last-mile public transportation applications.
- TML is developing hybrid and range-extended-electric versions of its passenger car products like Hexa, Tiago and Nano for application in personal mobility.
- TML External collaboration:
  - Collaborating with other Industry OEMs to develop a common platform for hybrid and electric powertrain components under the xEV-One project funded under the Faster Adoption of (Hybrid and) Electric Vehicles (FAME) scheme by the Ministry of Heavy Industry, Govt. of India.
  - Supporting several research projects by premier research institutions in India in alternate powertrain technologies funded through



Uchhatar Avishkar Yojana (UAY) and Impacting Research Innovation and Technology (IMPRINT) programmes by the MoHRD

#### Reducing the environmental impact of refrigerants

In Super Ace TCIC and Super Ace 1.4L Dicor BS IV we have implemented new type of compressors in the refrigerant circuit which has resulted in reducing the quantity of high GWP refrigerant by 95 grams. TML is part of a consortium working on alternate technologies for deployment of low Global Warming Potential refrigerants in Mobile Air Conditioning systems.

#### **Developing Safe Mobility Solutions**

TML R&D team is committed to develop safe products incorporating latest technologies thereby ensuring vehicle occupant and pedestrian safety. Our Integrated Safety Center is responsible for developing safe products across all range (from passenger cars to heavy commercial vehicles).

Our safety development team ensures that product design meets latest regulatory norms, consumer group norms and due care norms in the area of safety. This Integrated Safety Centre is fully equipped to carry out different types of tests like, full vehicle crash tests, sled tests, Pedestrian protection tests, BIW strength and anchorage tests, Interiors evaluation tests, Material characterization tests, commercial vehicle tests, security systems evaluation tests, Advanced Driver Assist System (ADAS) evaluation tests.

We also have dedicated CAE group who is responsible for developing vehicles structures and occupant restraint system (airbags, seatbelts) meeting target crash safety performance requirements. All projects under development are routed through physical and digital validation process. Our facility is accredited by VCA (Vehicle Certification Agency), UK as well as ARAI wherein both agencies witnesses the tests at facility and provide compliance certificate.

Our achievements towards improving safety of vehicles:

- Nano steering wheel 3D logo ARAI certification
- Tiago ARAI certification for safety tests
- Bolt & Zest ARAI certification with VAVE design proposals
- ARAI certification for 1516 facelift cab, 709, Ultra 15.5T for Under-run protection devices
- TATA Xenon became first Indian Pick-up rated 4 STAR in Australian NCAP (ANCAP)

#### **Meeting Homologation Requirements**

Emissions & Safety regulations are increasingly becoming stringent. The entire country would become BS IV Emissions level compliant from April 2017 onwards and BSVI Emissions level compliant by April 2020 as per the notification issued by the Government of India

Hence it requires phenomenal design, developmental, validation, calibration & launch efforts concurrently for both PV & CV business units. Also many of the existing models may not directly qualify for fulfilling BS VI Emission compliance due to packaging, cost & technical barriers. In view of this, there is an inherent need to conduct business sensitivity analysis for assessing the sustainability aspects of our business units from holistic perspectives.

Also Government of India has promulgated CAFÉ Norms for M1 category vehicles applicable from 1st April 2017 and 1st reporting from April 2018 onwards. This would call for establishing robust mechanism at a strategic level to review, track & modify the domestic product plans towards ensuring the sustainable compliance at the overall organizational level.

As per sustainable development followed by TML, our Passenger and Commercial Vehicles fulfil all the applicable regulatory requirements in the domestic market as per CMVR Certification. Our Passenger and Commercial vehicles fulfil the regulatory requirements of the export markets as per the applicable national requirements.

#### **Efficient transport**

#### **Fuel efficiency improvement initiatives**

- We have been able to achieve 2% 3% fuel efficiency improvement through advanced formulation used in engine oil
- Similar initiative for axle and transmission oil has been initiated targeting fuel efficiency gain of 5% in conjunction with abovementioned approach
- Software features in engine management system & vehicle level parameter optimization has resulted in fuel efficiency improvement. One such feature is the Multi-DriveEconomy mode feature in Bolt leading to 1-2% gain in fuel economy compared to normal mode
- Harnessing potential of Automated Manual Transmission (AMT) driveline for fuel economy improvement
- Downsizing of gasoline engine from 4 cylinders to 3 cylinders for Tiago
- Downsizing of diesel engine from 4 cylinders to 3 cylinders for Tiago

#### Light weighting of engine & sub-systems

Focus on new engine development in all Aluminium material continues with Tiago which has new generation lightweight petrol engine. Light weighting also improves fuel economy of engine by 1 -2 % compared to same engine in cast iron material. Similar initiatives are also being taken in diesel engines in car & utility vehicle segment without compromising on durability advantages with cast iron material.

#### **Enhancement in oil drain interval:**

We have developed API CI4+ 15W40 engine oil enhancing oil drain interval by 30% leading to enhanced customer delight. Improvement in engine oil to increase oil drain interval helps customer to reduce cost of ownership. It helps in reducing downtime and less oil is discarded reducing environmental impact. This oil has been introduced on all heavy commercial vehicles with 697 BS-IV engine.



### Tata Motors Products Supporting the Cause of Swachh Bharat Abhiyan

Tipper - mainly used for household garbage collection from narrow lanes





Jetting cum suction machine for dislodging and removing obstructions and blockages from sewer lines

Cesspit tanker for suctioning sludge/ slurry from sewers, septic tanks etc.





Garbage compactor for safe and efficient collection of waste

Truck Mounted Sweeping Machine for cleaning colony roads, parking and other paved Areas



### Life Cycle Assessment for Holistic Improvement in Sustainability Performance

As part of our Sustainability program, a key initiative was taken by Engineering Research Center (ERC) to evaluate the environmental footprint of our products. We have found Life Cycle Assessment (LCA)<sup>1</sup> to be a key enablerin gaining holistic perspective on overall environmental impact of any product or process on the ecosystem. During the FY 2015-16, we conducted LCAs of Five products which includes Zest-Diesel, Tiago-Petrol, Magic Iris-Diesel, Magic Iris-CNG & Magic Iris-EV.

We had initiated the environmental assessment program of the complete vehicles in 2012. After initial success of this approach with passenger vehicles it was decided to include commercial vehicles in the assessment. Tata Magic Iris is the smallest offering from TML in CV segment and



Happy to see Tata Motors pushing Life Cycle Assessment of all its cars. economictimes.indiatimes.com/industry/aut

most importantly Magic Iris being available in Diesel, CNG and electric variant gave us opportunity to work on the same vehicle 3 different engine configuration. We have adopted framework laid out by ISO as per the ISO 14040/44 standard for carrying out the LCA studies.

The results and insights gathered from this LCA study have been used for internal benchmarking to strategize future sustainability improvements as well as for communication to internal audience including manufacturing, technology, marketing and leadership teams as well as external audience like auditors for Green CO rating.

#### Advance Automotive Materials

- a) In view of upcoming Indian regulatory requirements for RRR & ELV, TML is working proactively on part material marking for plastic parts for all upcoming & new models. TML is continuing to ensure meeting RRR & ELV requirements for European Export market.
- b) For all new M1 category models, TML parts are designed not to have presence of hazardous heavy metals Lead, Mercury, chromium & cadmium as per upcoming Indian Regulatory requirements.
- c) Being major Indian OEM & having experience from



School Buses - Used for Student Transport: Carrying Students to and from School. Last year TML had supplied approx. 10000 nos.

to Indian Market.

30 seater school bus



Passenger vehicles -33 Seater Ultra Passenger

Standard Passenger Buses - Used to carry passengers. This type of buses used in City Transit Bus and Intercity transfer Bus. Last Financial year TML had supplied approx. 6000 nos. to Indian Market.



Ambulances – Different kinds of ambulances are made ranging from Patient transportation to Life support ambulances. TML has supplied close to 400 ambulances in FY 15-16.

- export especially European market, TML has given inputs to Indian Ministry through SIAM on frame working of various upcoming regulations.
- d) TML is working on following green technologies / projects
- Use of Air drying paint replacing conventional stoving paints offering approx. 15-20 % energy saving
- Use of green plasticizer, generated from waste stream in polymers replacing conventional plasticizers

- 3. Increasing drain period of the transmission oils significantly.
- 4. Energy saving initiative for car body paints by adopting single cycle baking in place of multiple cycle baking.
- Energy saving initiative by use of micro alloyed steels for forging parts by optimizing heat treatment cycle

#### TML partners with Indian Institute of Technology, Bombay on engineering education and research collaboration

TML and Indian Institute of Technology (IIT) Bombay have signed a five year Memorandum of Understanding to create a technological partnership in areas of mutual benefit and interest with a focus to ensure the engineering needs of the future automotive industry. Series of interventions have been identified to cater to a future-ready organization, Joint R&D projects will also be undertaken for development of new technologies in various engineering domains.





# Case Study 1: Water Based Paints – An Eco-friendly breakthrough

In case of the existing approach of using Solvent base monocoat paints, there are several environment, health and safety related challenges. These solvents contain high levels paint instead of thinners. This not only helps to reduce the harmful VOC emissions, but also helps in maintaining good health of the employees within the plant.

Paint shop team interacted with suppliers about the issues with solvent based paints, procured samples of water based





of VOC and emanate strong odour as well as generation of hazardous sludge which is difficult to treat. These solvent based paints have ill-effects on environment and also on human health apart from fire hazards- material storage, handling & during application.

Water based monocoat protect the metal surfaces from rusting as they have excellent anti-corrosive properties. These coatings are eco-friendly as water is used to thin the monocoat paints from outside India & conducted trials. Results and performance were evaluated. Paint shop team concluded that all paint properties like excellent anticorrosive properties, paint adhesion, colour, gloss etc. were all as per required standards. We procured a batch of monocoat black & hands on application training was given to all operators working in the spare part painting area and found it beneficial in all aspects.

Environmental/Social Benefits :			
Ease of painting and increase in comfort to employees as no foul odour is emanated during application.	Cost of water based monocoat black is comparable to solvent based, with saving of only around 6000 ₹ per year.		
Eliminates health hazards during handling and application of paint. Easy cleaning process of equipment's post application.	Cost of dilution and cleaning thinner is saved i.e. 72000 (cost of thinner for dilution) + 40000 (cost for gun cleaning) =₹1,12,000 per year. Normal tap water is used for all purposes.		
Reduction of VOC by 97%. Reduction of sludge generation	Total cost savings of around ₹1,18,000 per year		

# Case Study 2: Introduction of sprayable chrome paint for painting prototype vehicle add- on parts instead of chrome plating

Painting of vehicle add on parts like logos, emblems & interiors dashboards and door finishers are chrome plated as it imparts decoration, anti- corrosive and hardness properties. But hexavalent chrome used in chrome plating is the most toxic

chemical that has ill effects on environment and human health. Detrimental effects on human health includes lung cancer & skin dermatitis. Chemicals used in chrome plating are extremely flammable and therefore can pose a fire risk as well.

ERC Paint shop team has implemented a new chromium free Eco friendly Chrome finish paint. Parts like bumper grills, mascots, fog lamps bezels, inner door handles that were chrome plated by suppliers for final production, can be painted in-house, with cost, time benefits and with a comparatively very safe process for prototype and show car applications.

Sprayable chrome finish paint consists of highly polished aluminium pigments. The aluminium pigment get oriented horizontally parallel on the painted surface after spraying & gives very good reflection of light resulting in to finish similar to chrome plating. Application of chrome painting is done by mist spraying (fogging) of chrome paint on highly polished black /white surface depending on the intended chrome effect.

Chrome paint applied on black surface develops dark chrome like finish, if applied on white surface develops in to bright chrome like finish, and if it is applied on white surface with more number of coats results in to Satin chrome like finish. This paint can be over coated by clear coat thereby giving it an additional protection for paint film.

#### **Environmental/ Social benefits include the following:**

- O Chromium free, Non-Carcinogenic, hence Eco-Friendly
- O No substantial harm to air, water & environment.
- Less harmful effects on human health with use of all Personal protective equipment's.
- O Air drying, No baking required.
- O Exact representation of chrome finish on prototype adds on parts.
- O Supplier dependency negated, so all parts can be painted in-house.





# Energy and Climate Change

With changing times and market, improving our systems, products & services is the need of the hour. Sustainability is transformation of business to meet the changing needs of society! Building resilient infrastructure and promotion of sustainable industrialization is what we inherently vouch for.



Prasann K Chobe Senior Vice President, Head - Manufacturing Operations, CVRIJ

In line with the Tata Group Policy on Climate Change, Tata Motors has articulated its Climate Change Policy which provides direction to our mitigation strategy on product thereby reducing environmental impact during use phase. Cross functional teams are formed at plants to implement climate change action plans. There are trained climate

#### **GHG Emissions Triggers Measures Sources** Manufacturing facilities Scope-1 and company owned vehicles Energy efficiency and **ENCON Initiatives** Improved usage of and Cost savings Renewable Energy Scope-2 **Electricity purchased Purchased goods** and Services Capacity building of Sustainable Supply **Supply chain & Logistics Chain Initiative** and improved efficiencies Transportation and distribution Scope-3 Waste generated Improvement in **Operational Efficiency Waste Management** during Operations **Emission Norms &** Fleet fuel efficiency, Efficient Use of sold products Fuel Efficiency/ Engine Technologies, Hybrids, CO. Standard and awareness Alternate fuels, EV

development, manufacturing and Supply Chain. Tata Motors is committed to providing sustainable mobility solutions which enhance organisational growth while reducing our dependence on fossil fuels and actively adopting non-conventional and renewables sources of energy. This strategy is being centrally through our R&D Establishment – Engineering Research Centre @ Pune and at all Plant locations. Tata Motors has a formal 3 pronged Broad Climate Change strategy to minimise our organizational GHG footprint.

We design products to deliver superior fuel efficiency

change champions across operations to steer forward the climate change agenda. These initiatives are extended to supply chain by creating awareness among suppliers and vendors on various environmental issues including energy efficiency and management. Best practices and case studies are regularly shared with suppliers and vendors through emails and during Supplier Meets.

We manage our energy needs in a responsible manner and continually seek opportunities to improve energy efficiency and increase the renewable energy component in our manufacturing process. The conventional fuels

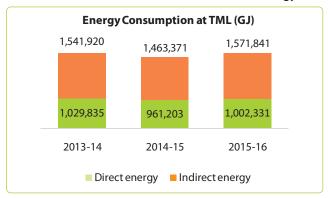
used to meet the energy needs are high speed diesel (HSD), light diesel oil (LDO), furnace oil (FO), liquefied petroleum gas (LPG), propane, compressed natural gas (CNG), and natural gas (NG). Diesel and petrol are consumed as fuel for engine testing and transport vehicles. For 2015-16, energy due to consumption of acetylene for TML is 2954 GJ while for the subsidiaries included in the reporting scope, it is 149.35 GJ. Due to changes in some of our operating conditions, we have faced a minimal rise in our gross energy consumption. Some of the changes included extra working shift at one of our locations and addition of new assembly line for a new product in PV range. For 2015-16, energy due to consumption of acetylene for TML is 2954 GJ while for the subsidiaries included in the reporting scope, it is 149.35 GJ.

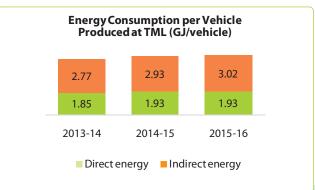
We design products to deliver superior fuel efficiency thereby reducing environmental impact during use phase. Cross functional teams are formed at plants to implement climate change action plans. There are trained climate change champions across operations to steer forward the climate change agenda. These initiatives are extended to supply chain by creating awareness among suppliers and vendors on various environmental issues including energy

efficiency and management. Best practices and case studies are regularly shared with suppliers and vendors through emails and during Supplier Meets.

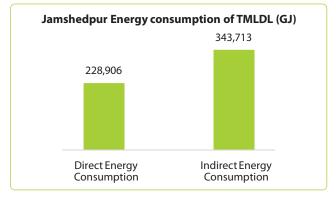
We manage our energy needs in a responsible manner and continually seek opportunities to improve energy efficiency and increase the renewable energy component in our manufacturing process. The conventional fuels used to meet the energy needs are high speed diesel (HSD), light diesel oil (LDO), furnace oil (FO), liquefied petroleum gas (LPG), propane, compressed natural gas (CNG), and natural gas (NG). Diesel and petrol are consumed as fuel for engine testing and transport vehicles. For 2015-16, energy due to consumption of acetylene for TML is 2954 GJ while for the subsidiaries included in the reporting scope, it is 149.35 GJ. Due to changes in some of our operating conditions, we have faced a minimal rise in our gross energy consumption. Some of the changes included extra working shift at one of our locations and addition of new assembly line for a new product in PV range. For 2015-16, energy due to consumption of acetylene for TML is 2954 GJ while for the subsidiaries included in the reporting scope, it is 149.35 GJ.

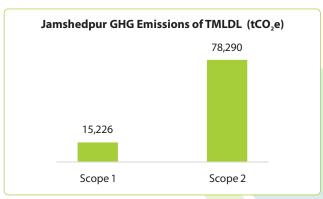
#### **Energy Performance of TML**



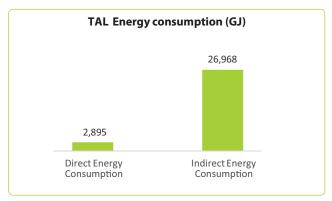


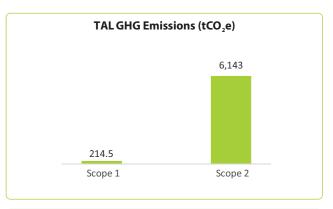
#### **Energy and GHG Performance of Subsidiaries**

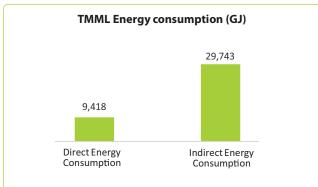




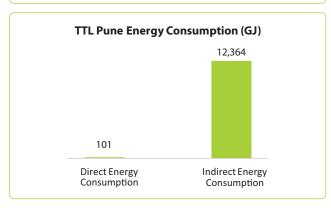
IPCC default net calorific values were used to convert the fuel consumption into standard energy units of Giga joules.

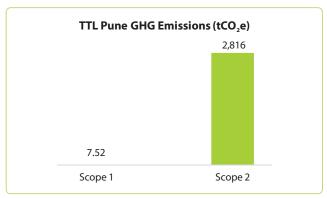












# **Energy Conservation Initiatives**

- Waste Heat Recovery System to recover waste heat from exhaust flue gases of surface& finish paint baking ovens, conversion of indirect fired baking ovens into direct fired burner of baking ovens, conversion of electrical heating into Natural Gas Heating System for washing machines
- Use of energy efficient 40W LED Batten fittings for task lighting, 100W LED High bay for General Lighting, 19W LED tube lights in office area, installation of 42W LED street lights, installation of 142W LED flood light fittings
- Elimination of pump operation by using gravity flow system, resizing of hydraulic power pack pump
- Compressed Air Pressure optimization at paint shop

and at other shops, use of portable small compressors for low compressed air requirement on holidays, installation of Shut Off Valves in compressed air network, downsizing of motors and Delta to Star conversion of motors

- Installation of variable frequency drives for various applications like Blowers, Pumps & Air supply plants
- Use of infrared sensors & timers for on-off control of industrial fans, lighting system of inspection booths and fresh air blower operation. Modification in electrical logic for automatic switching on-off operation of hydraulic motors, coolant pumps, blowers etc., optimization of AC plant operations.
- Through energy conservation efforts such as just in time lighting and use of compressed air as well as timer based air conditioning operation in offices, TMML

Dharwad has been able to save about 1.8 lakh kWh electricity.

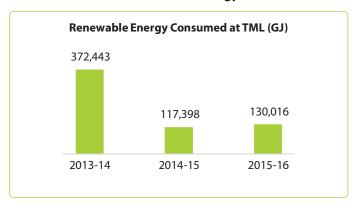
- Energy saving initiatives at TTL such as adoption of passive lighting techniques and retrofitting of existing CFL and fluorescent fixtures with efficient LED lights has led to considerable saving of electricity to the tune of approximately 67 Mwh.
- At TAL Nagpur, LED street lights have been installed as well as Highbay fittings having higher energy efficiency have been used leading to saving of roughly 27 Mwh.
- TTML Lucknow has converted EB energy to Green Energy by using Wind Energy thus resulting in 6% lesser cost than EB power. This has resulted in reduction of carbon footprint from 614 to 90 tCO<sub>2</sub> i.e. 85% reduction in carbon emission.

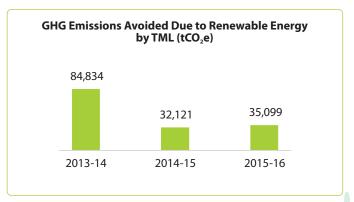
# Energy Conservation Highlights for TML

- Electricity saved 1.42 crore kWh
- LDO saved 6 KL
- LPG/Propane saved 586.32 MT

Renewable energy consumption is mainly from captive wind power plants and from third Party Power Purchase. During the year 2015-16, we utilised 1,30,016 GJ of renewable energy leading to avoidance of 35,099 tCO₂e GHG emissions. CVBU Pimpri Plant utilized total wind power generation of 2.35 crores units during the reporting period from 'captive wind power' projects of 21.95 MW capacity. 21.95MW wind power project is registered under REC Scheme. Cumulative 63,432 RECs generated in 2015-16; out of which 40,517 RECs sold through auction, cumulative benefit is of ₹5.85 crores (Please refer to Page 102 of our Annual Report 2015-16).

#### Renewable Energy Consumed and Associated GHG Emissions Avoided by TML





Renewable energy consumption dropped in FY 2014-15 due to regulatory restrictions on renewable power purchase.

Benefits Achieved through REC				
Year	Year REC's generated REC's sold C			
2013-14	32,544	18,931	2.72	
2014-15	58,558	28,829	3.14	
2015-16	63,432	40,517	5.85	

### In-house Rooftop Solar Initiatives

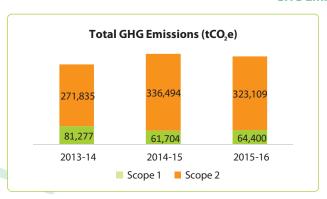
Production of electricity from fossil fuels emits more CO<sub>2</sub> emissions and has more global warming potential. This results in increase in carbon footprint of the organization. To minimize the impact caused to environment through energy consumption, TML has explored onsite solar power generation possibilities. PVBU San and Plant utilized 0.8 crores kWh wind energy purchased through TPTCL (Tata Power Trading Company Limited). Roof Top Solar PV Power Plant of 1.8MWp capacity has been installed & commissioned on Office Blocks at Pune Plant (CVBU& PVBU). This has resulted in generation of 21.29 Lakh KWh electricity. In addition to this, Roof Top Solar PV Power Plant of 2.0MWp capacity was installed & commissioned on Office Blocks at San and on approximately 20,000 sq meters area. This has resulted in generation of 17.30Lakh KWh electricity. These initiatives will serve as a pathway to achieve RE100 initiative.





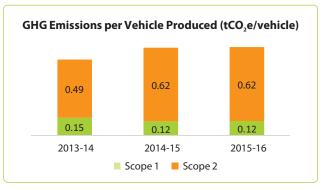
#### Solar panel and inverters installation at Sanand plant

#### **GHG Emissions at TML**



Intensity ratios are calculated on basis of total vehicles manufactured

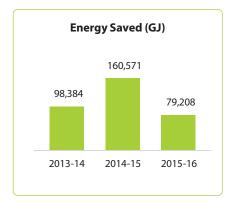
Apart from GHG emissions arising from process heating operations, our manufacturing operations also generate process emissions from welding and metal cutting operations. These have been quantified separately as their quantum is directly proportional to manufacturing activity and does not offer scope for mitigation. Scope 1 GHG emissions due to consumption of acetylene and solid carbon dioxide are 206.9 tCO<sub>2</sub>e and 761.5 tCO<sub>2</sub>e respectively for TML. Similarly, emissions due to acetylene and solid carbon dioxide for Subsidiaries are 10.4 tCO<sub>2</sub>e and 346.86 tCO<sub>3</sub>e respectively.

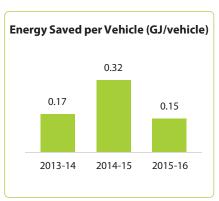


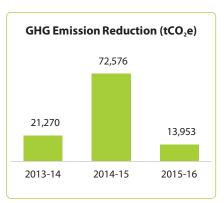
Intensity ratios are calculated on basis of total vehicles manufactured

Scope 3 emissions as a result of employee commute of our employees by Company owned transportation accounted for 14,334tCO<sub>2</sub>e of GHG emissions. This value includes the employees of our Subsidiary companies in our reporting boundary this year. Going forward we are working on strengthening our systems for including data on other Scope 3 emissions which are material to TML such as upstream & downstream value chain, fleet emissions and business travel. TML intends to report on Scope 3 emissions from all business travel in FY 2016-17.

### Energy Savings due to ENCON Initiatives at TML







The ENCON initiatives have resulted in  $\rm CO_2$  emission reduction of 13,953 t $\rm CO_2$ e for the year 2015-16. We have solar PV installations at three of our manufacturing plants in India. This initiative will help us drive the development of a reliable and affordable supply of renewable energy in India and thus minimise the carbon footprint of our operations.

monitor air emissions from the production facilities including an on-line monitoring and alarm system for incinerator emissions. We use R134a which has zero ozone depleting potential as a refrigerant in our products. During the year, we have used 158.74 kgs CFC-11 equivalent of ODS.

### TML joins RE100 in drive for 100% renewable power

We have become the second Indian company to join RE100 which is a global collaborative initiative of the world's most influential companies aspired to source 100% renewable power. The RE100 movement led by The Climate Group in partnership with CDP aims at speeding up the transition to renewable energy.

Maximizing the use of renewable energy in our manufacturing operations will not only reduce carbon emissions but will also lead to long-term financial savings. Currently, TML obtain around 9% of electricity from renewables and has its own 'captive wind power' project of 21.95 MW capacity.



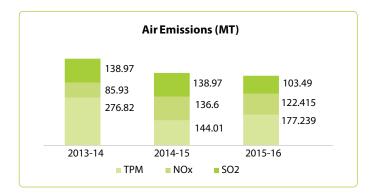
#### **Air Emissions**

Particulate matter (PM), oxides of nitrogen (NOx) and sulphur dioxide (SO<sub>2</sub>) constitute major other air emissions arising due to our manufacturing activities. We continually work towards reducing these emissions through efficient manufacturing process and use of cleaner fuels. Various steps are taken to effectively

In our India manufacturing locations, Paint Shops are designed for use with solvent based automotive paints. Paint Shops are equipped with appropriate emission control equipment to control emissions from painting and paint baking operations. Going forward, we intend to determine and quantify the extent and significance of volatile organic compound (VOC) emissions using methodologies as appropriate to each Plant.

#### **ODS Consumption at TML and Subsidiaries**

ODS Consumption (TML and subsidiaries)	Quantity (CFC-11 eq.)
2013-14	58.35
2014-15	64.69
2015-16	158.74



#### **Air Emissions at TML Subsidiaries**

Parameters	Units	TMML	TTL Pune	TMDL-JSR	TAL
Total Particulate Matter (TPM)	MT	14.58	4.75	14.74	2.38
Oxides of Nitrogen (NOx)	MT	0.067	24.08	2.198	0.03
Sulphur Dioxide (SO₂)	MT	0.061	10.14	3.045	67.6



# Environmental Stewardship

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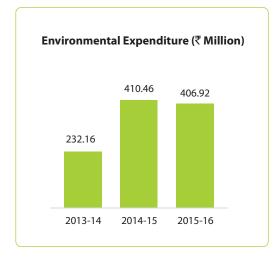
Environment is integral to our operations management and we are addressing associated environmental and social risks, to ensure sustenance of our operations and business. Sustainability is investing for a secure future!



**Anil Sinha**Vice President
Manufacturing Operations, PVBU

Environment conservation has always been a key priority for TML and we have consciously strived to minimise the impact of our operations on the environment. With the objective of embedding our commitment towards environment, we have established a board level Safety, Health and Environment (SHE) Committee responsible for monitoring and reviewing the environmental performance across the business. SHE committee is also responsible for approving and overseeing the deployment of action plan for environmental focus areas. Composed of independent as well as executive directors, SHE committee is empowered to take prudent decisions at the highest level. At the business level, we have a SHE council which reviews the environmental performance at the individual business levels. There were no significant environmental fines or sanctions during the reporting period.

All Manufacturing Plants in India are certified to ISO 14001 - Environment Management Systems. We aim to transition to the new 2015 version of ISO-14001 progressively at all Plants over the coming 2 years. All CV and PV Manufacturing Plants in India are also certified to OHSAS 18001 - Occupational Health & Safety Management System. All CV Manufacturing Plants in India are certified to ISO 50001 - Energy Management System (EMS). At all plants level, we have undertaken several initiatives for resource conservation such as re-cycling of treated effluents back to process, energy and material recovery from hazardous wastes and rainwater harvesting. Plants also generate in-house renewable power and source offsite green power where available. Our expendituretowards environmental protection amounts to ₹ 406.92 million in FY 2015-16 whereas for our subsidiaries the expenditure was ₹38.90 million.



Environmental Protection Expenditure Breakup (TML)	₹ Million
Treatment and disposal of waste	28.20
Depreciation and maintenance cost of equipment used in pollution control	15.69
External services for environmental management	267.09
External certification of management systems	1.27
Personnel for general environmental management activities	4.80
Extra expenditures for installing cleaner technologies	65.60
Other environmental costs	24.26

#### **Raw Material Conservation**

The raw materials we consume include metal in the form of sheets and plates, castings and forgings. Other components include tyres, fuel injection equipment, batteries, electrical items, rubber and plastic parts, paints and thinners for manufacturing the vehicles. Our internal production processes entail use of consumables such as lubricants, welding consumables etc. Apart from in-house manufacturing, we also source auto components from our subsidiaries and suppliers which consist of axles, engines, gear boxes and cabs.

Resource optimisation is critical from the business perspective for us in the sensethat reducing the weight of vehicles leads to significant improvement in fuel efficiency thus leading to saving of fuel and reduction in GHG emissions. Apart from this, we continually evaluate resource conservation opportunities in our processes which not only helps us save cost but also reduces the generated waste in many cases.

#### **Material Consumption at TML**

Material Consumed (TML)	Units	FY 2013-14	FY 2014-15	FY 2015-16
Steel	Tonnes	1,14,185	96,882	1,04,432
Steel Tubes	Tonnes	3	12	6
Non-Ferrous Alloys	Tonnes	3,838	3,548	3,237
Ferrous Alloys	Tonnes	2,740	3,408	3,449
Steel Melting Scrap	Tonnes	50,456	59,185	63,436
Paints, Oils & Lubricants	Tonnes	2,680	2,078	2,353
	Kilo Litres	9,140	9,131	8,475
Tyres, tubes & flaps	Numbers	31,02,908	32,49,683	36,27,759
Engines	Numbers	81,644	1,05,182	1,18,911
Sand	Tonnes	20,161	51,468	66,726

#### **Material Consumption at Our Subsidiaries**

TMLDL, Jamshedpur	Units	2015-16
Steel	MT	342.92
Paints	KL	29.65
Oil	KL	587.67
Lubricants	MT	576.21
Steel Shot	MT	131.38

TMML, Lucknow	Units	2015-16
Galvanized Steel	MT	550
FRP (fiber Reinforced Plastic)	MT	84
Plywood	MT	230
Glass	MT	174
Plastic	MT	35
Aluminium	MT	42

#### **Material Consumption at Our Subsidiaries**

TMML, Dharwad	Units	2015-16
Galvanized Steel	MT	10,174
FRP (fiber Reinforced Plastic)	MT	164
Plywood	m2	1,88,656
Glass	Nos	58,863
Plastic	Nos	27,49,609
Aluminium	MT	183
Thiner	L	73529
Paint Used	L	213888

TAL	Units	2015-16
Steel including Forgings	MT	62.85
Casting	MT	332
Paints & Thinner	KL	16.95
Oil & Lubricants	KL	15.0
Wood	CFT	32452
Composite Material	MT	59.223
Titanium	MT	33.78
Aluminium	KL	24.8

# Integrating Principles of Circular Economy

Minimising environmental impacts, mitigating associated risks and resource conservation are the driving principles of Tata Group's Sustainability Policy. While we are complying with waste management laws in our respective geographies, we have recognised great scope exists in 'leading by example' in the area of waste management and resource conservation. We are actively working towards adopting the principles of 'Circular Economy' at TML. This initiative will help us transform the way we look at'Waste Management' and will help us Reduce, Reuse and

Recover (R-R-R) to address emerging resource scarcity/security issues of the future and reduce the environmental impacts of our production and consumption. We are strongly propagating the need to implement R-R-R at our manufacturing locations as well as by our suppliers. Through our Tata OK and Tata Assured initiative along with reconditioning business Prolife, we are working towards extending the life of our products while ensuring optimum operational performance and minimizing usage of virgin materials. This is helping us in lower the environmental burden, reducing the waste generation and improving resource conservation.

#### **Prolife**

Our Prolife business division works in the area of reconditioning and remanufacturing auto components which have reached the end of their useful life. We offer customers an option to extend the life of engines and other vehicle aggregates by bringing them to same as new condition in a manufacturing environment. Aimed at commercial vehicle owner, Tata Prolife aims at extending the life of vehicles and aggregates through systematicoverhauling leading to improved efficiency and optimum performance while also ensuring several added years to the life.



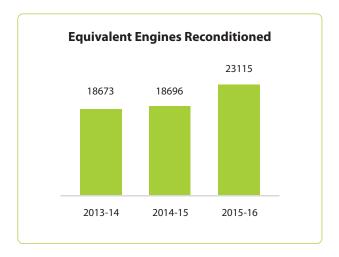
Reconditioning is done on vehicular aggregates which has run one life, and by reconditioning they are infused with new lease of life, otherwise they would have gone scrap. Reconditioning is done in a factory like atmosphere, with original specifications, so that these aggregates again run with designed efficiency levels. Apart from engines, gearboxes, clutch pressure plates, Brake components, etc. are also reconditioned.

These reconditioned engines need wooden boxes for packaging and transportation. The wood used in these boxes are also recycled by Prolife. An equivalent engine needs 7 ft<sup>2</sup> of wood for packaging, but in Prolife we have used only 1.9ft<sup>2</sup> of wood per equivalent engine in last year

whileremaining old wood was recycled. In the past four years, we have been able to bring down this fresh wood consumption by nearly 30% through recycling practices.

In terms of energy consumption, Prolife business has utilised 49 kWh electrical energy per equivalent engine in 2015-16 for reconditioning. This is a reduction of 30% over past four years.

In reconditioning activity, our main focus is to avoid scrapping of old parts. In order to achieve this, a separate function called 'Salvaging' has been created and is headed by a Divisional Manager.



Recycled Metal Scrap and Forgings (t)

41,149.80

22,303.14

22,333.35

2013-14

2014-15

2015-16

As part of Salvaging, new projects are continuously taken, for salvaging worn out parts by using metallurgical engineering. This salvaging helps in increasing the recycle content of engine. For example, an equivalent engine weighs about 360kg and 2/3<sup>rd</sup> of its parts are recycled back by Prolife.

In an efforts to cut down on waste, we are maximizing the recycling opportunities at our operational locations. One

such effort is through recycling of metal and forging scrap which is reused at our foundries in Pune and Jamshedpur. Through this recycling we are able to partially offset the need for fresh metal. This recycling significantly contributes to reducing the environmental impact since the overall impact of substituting virgin metal with recycled scrap avoids the detrimental effects which would have across the value chain in mining of ore, transportation and conversion to useable metal.

#### **TATA OK**

Recognising that used Commercial Vehicles exchange hands 3-4 times in their life span of 15 years we have come up with TATA OK which is a platform providing single window solution for all those customers who want to exchange, sell or buy preowned commercial vehicles.



Through scientific way, proper processes and refurbishment, TATA OK has proven beneficial to customers who wish to sell old CV and purchase new ones or wish to get right price of their used vehicles.

TATA OK stands committed to provide higher resale price and offer reliable refurbished and certified vehicles to those who can't afford to purchase new CV but still want a right product at right price.

#### TATA OK Highlights:

- 53500 New Customers added since inception
- Sold 43530 SCV, 6450 LCV & ICV, 3100 M&HCV
- Network spread across India thru 409 Channel partners.

#### **TATA Assured**

Tata Motors Assured is the Pre Owned vehicle brand from TML. Launched in 2008, it offers a one-stop solution to customers willing to exchange their existing cars for new Tata cars.

Through Tata Assured, we have established stringent certification norms on make, age, mileage, previous owners and retrofitting for vehicles in order to ensure that prospective customers have the best



vehicles to select from. Buyers benefit from 1 year warranty on vehicles which have been refurbished as per 16 point refurbishment check list while certified as per 100 point checklist. Peace of mind is ensured through 3 free services and 24x7 road side assistance.

We are fully aware of the impact of packaging materials on the environment and we have been undertaking several interventions to reduce our packaging requirements. We have been traditionally using wood for packaging in form of crates and pallets. This has now been considerably substituted with either corrugated boxes, plastic or metal. We are further looking to minimise the use of corrugated boxes and increase the use of reusable packaging materials which can utilised multiple number of times. For internal movement of parts and components we have nearly done away with non-reusable packaging options and this has helped us cut down on packaging waste which is generated at our manufacturing locations.

Being part of an industry where we engage with large number of suppliers, we have been educating and encouraging our suppliers to adopting reusable packaging options and minimise the use of packaging wherever possible. Through our periodic interactions with vendors and suppliers, we create awareness about the environmental impacts of the packaging materials and the mitigation options. Through this proactive engagement, we are confident of propagating change at larger level ensuring sustainable operations in automobile industry.

### Water Management

Water consumption has been identified as one of the key sustainability issues for us and we have set up a comprehensive strategy in order to manage the water resources in our operations. The water demand at nearly all of our operational locations is significant owing to water intensive processes such as painting, casting, forging, fabrication etc. Apart from this, large quantity of water is used for non-industrial activities resulting out of the large number of workforce that we employ.

Recognising the importance of this issue, we have formed cross functional teams drawing members from Utilities, Manufacturing, Support Services, Human Resource and Technical Servicesamong other divisions in order to identify the areas of improvement and select appropriate water conservation projects and technologies to reduce water intensity. If fact, water conservation features among the key selection parameters while evaluating any new technology and we aim to make maximum impact right from the inception stage in order to derive greater benefits.

It goes without saying that the commitment towards conservation of critical natural resources needs to be embedded within the organisational culture and has to percolate from the top decision-making level right down to the shop floor. With this objective, we have taken several initiatives to raise awareness amongst employees and workers regarding the urgency of action required towards water conservation. Through attractive posters and banners displayed at key locations such as washrooms, we have tried to communicate the message regarding the need to conserve water and step to achieve the same. We even encourage people at our manufacturing facilities to report any observed leakage through a formal compliant management system which is then attended on priority basis by a dedicated team.

Some of our technological approaches towards water conservation are:

- Maximising the use of treated effluent through filtration, Ultra Filtration, Reverse Osmosis
- Variable frequency drive for optimization of pump operation
- Use of low flow fauce ts to reduce water consumption



The manufacturing locations of TML receive their water from various sources. Water at Pune is supplied completely by municipality while for Sanand and Jamshedpur, we draw water from rivers / surface water sources. At Pantnagar and Lucknow, we are dependent on ground water for our water requirements. In order to reduce our dependence of precious ground water resource, we have established rain water harvesting facilities at Pantnagar and Lucknow. At Dharwad, water is sourced from mixed sources which includes municipal supply, ground water withdrawal and harvested rain water. We have carried out studies in the past to determine the water related risks at our operations and none of our plants draw water from sources which significantly affects the water availability.

At the Sanand plant, the rain water was washed as runoff till now with very little rainfall percolating the underground water table. Looking at the cost incurred for purchasing fresh water, we decided to develop three water retention ponds of 78 crore litres capacity. This step was taken to enhance water availability in and around the plant area by coming up with a viable & cheaper solution to collect the precious water drops falling from the sky and diverting maximum possible water to the ground water by suitable rainwater harvesting structures.

These water retention ponds have been designed in such a way that all rainwater and runoff generated within plan is going to accommodate in them. This has led to ultimate increase in the water table in and around the plant premises and has helped in reducing evaporation loss of lake water while also diminishing flooding during peak monsoon.

#### **Water Consumption at TML Subsidiaries for 2015-16**

Subsidiary	Water Source	Quantity (m³)	
TAL	Municipal Water	1,20,719	
TTL	Ground Water	1,49,767	
TMML Ground Water		1,25,376	
	KIADB Water	16,890	
TMLDL	Surface Water	5,15,254	

# Effluent Treatment through Reverse Osmosis at Pune

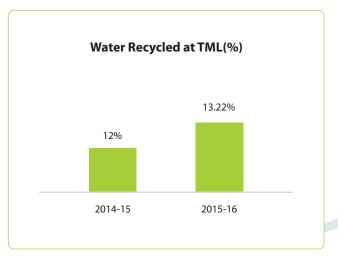
The rising cost of industrial raw water, legal conditions regarding 'zero discharge' and the need to conserve water – a precious natural resource has provided compelling reasons to recycle industrial effluent and sewage back for re-use in process. Currently, various technologies are available for tertiary treatment of effluent, of which Reverse Osmosis using different kinds of membranes is widely used. However, high energy cost, variability in feed (treated effluent) characteristics, high cost of membranes, skilled manpower for operation are some challenges faced in adoption of the technology.

TML has overcome these challenges for setting up effluent recycling system at Pune by collaborating with reputed OEM who has set up a containerized RO Plant which uses their patented plate and tube type of membrane instead of conventional spiral wound membrane. Permeate from RO plant is blended with raw water from utility and re-used in manufacturing process. In FY 2015-16 a total of 1,00,672 m3 of treated effluent was re-cycled back into the process leading to significant cost savings.

In order to reduce our fresh water intake, we have taken up rainwater harvesting in big way across all our manufacturing plants. We have setup channels and drains so as to make maximum utilisation of the available plant area to harvest rain water. For any new construction that

takes place provision for rain water harvesting is made. The harvested rain water not only helps us offset the withdrawal of water from surface / river / ground, it also helps us realise cost savings. Going ahead we are exploring the potential to increase the amount of rain water we can harvest and utilise it in an even better way.

Another approach for reducing the withdrawal of fresh water is by recycling and reusing the effluent generated from processes and domestic use. While the norms as laid out by regulatory authorities are now becoming stringent, we have always given high importance to treating the effluents and using them in lieu on fresh water. All TML plants in India comply with Zero liquid discharge conditions except Jamshedpur where treated wastewater is partly used for cooling tower makeup/gardening and rest is discharged outside the plant premises into natural sources. We have reused2,41,933 m3 effluent back to manufacturing process after tertiary treatment at Pune, Pimpri and Pantnagar, while at Jamshedpur 3,27,116 m3 wasrecycled as top up for cooling process. Together, they represent nearly 13.22% of our fresh water withdrawal for the year 2015-16. At other locations, we are using effluent post treatment for gardening.



In our journey towards reducing our water footprint we have added capacity to the Reverse Osmosis (RO) plant at Lucknow and also upgraded our ETP infrastructure at Jamshedpur.

### Waste Management

Our waste management practices place emphasis on reducing waste generation, reusing/recycling waste generated and disposing waste in an environmentally sound manner. Our manufacturing Plants are vertically integrated and a number of manufacturing operations from pressing / stamping, fabrication, painting, machining, assembly and testing of aggregates to final assembly of vehicles are carried out in-house. Our requirement of critical-to-quality castings (both iron and aluminium) are met in-house through captive foundries at Pune and Jamshedpur.

With a strong strategic drive to divert hazardous wastes away from such destructive disposal which adds to environmental burden, a number of re-cycling options have been explored and implemented. Going forward we committed to increase this quantum and aim for "Zero waste to Common Waste Disposal Facilities". Some initiatives include – energy recovery from high calorific value wastes through co-processing route with cement industries, solidification / stabilization of ETP sludge as pavers and conversion of paint sludge into industrial primer.

TML - Hazardous Waste Data for FY 2015-16

TML - Hazardous Waste	Data for FY 2015-16		i
Waste Category <sup>2</sup>	Waste Description	Unit	Quantity
5.1	Used/Spent Oil	MT	202.17
5.2	Oily Wastes & Residues	MT	380.77
12.5	Phosphating Sludge	MT	200.99
15.1, 15.2	Asbestos containing scrap	MT	2.21
20.1, 20.2	Contaminated/Spent Thinners & Solvents	MT	162.96
21.1, 23.1	Paint Sludge & Residues, Sealant residues, Pattern waste from R&D Activity	MT	2825.54
33.3	Discarded containers of Haz. Chemicals	MT	98.91
34.1	Chimney Soot	MT	0.76
34.2	Spent DM Plant Resins	MT	18.82
34.3	ETP Sludge	MT	955.43
34.4	Oil and grease skimming residues from waste water treatment	MT	21.3
35.2	Spent catalyst from Heat Treatment Shop	MT	0.10
36.2	Incineration Ash	MT	38.59
As per Schedule II	Shot-blasting dust	MT	20.45
As per Schedule IV	Non-ferrous metal scrap	MT	144.73
-	Used Oil for recycling	MT	8.32
-	Scrap Lead Acid Batteries <sup>3</sup>	MT	141.47
Reference of Regulation	E-Waste <sup>4</sup>	MT	148.89

<sup>&</sup>lt;sup>2</sup>As per The Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008 as amended.

<sup>&</sup>lt;sup>3</sup>As per The Batteries (Management and Handling) Amendment Rules, 2010 as amended.

<sup>&</sup>lt;sup>4</sup>As per The E-waste (Management and Handling) Rules, 2011 as amended.

TML - Hazardous Waste Data for FY 2015-16

Waste Category	Waste Description	Unit	TAL	TMLDL Jamshedpur	TMML	TTL Pune
5.1	Used Oil	MT	0.42	5126.56	1.20	0.20
5.2	Grinding Sludge	MT	0	72.16	-	0
21.1	Paint Sludge	MT	0	237.76	167.73	0
34.3	ETP Sludge	MT	0	Common with TML	108.66	0

#### TML & Subsidiaries- Non- Hazardous Waste 2015-16

Sr. No.	Waste Description	Unit	Quantity
1	Canteen waste⁵	MT	4443.83
2	Sold to Scrap Dealers <sup>6</sup>	MT	52279.98
3	Foundry waste sand <sup>7</sup>	MT	66725.80

#### Total Waste Disposed by End Disposal Method at TML

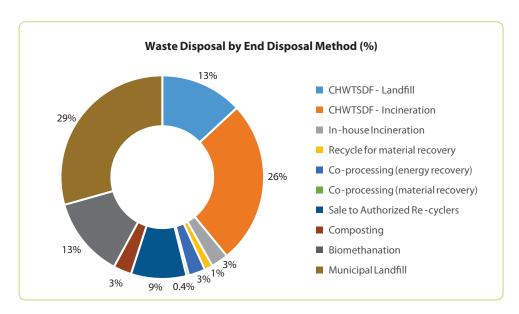
Disposal Method	Quantity (t)
CHWTSDF - Landfill	1291.06
CHWTSDF - Incineration	2566.18
In-house Incineration	271.28
Recycle for material recovery	129.33
Co-processing (energy recovery)	261.07
Co-processing (material recovery)	38.59
Sale to Authorized Re-cyclers	869.14
Composting	285.95
Biomethanation	1257.80
Municipal Landfill	2900.08

<sup>&</sup>lt;sup>7</sup>Foundry waste sand data is only for TML Foundries at Pune & Jamshedpur



<sup>&</sup>lt;sup>5,6</sup>Canteen waste and scrap is inclusive of subsidiaries covered in our reporting boundary this year - TAL Pune, TML Drivelines, TMML Lucknow as these are operating out of our manufacturing plants

#### **Waste Disposed at TML**







# **Biodiversity Management**









Our manufacturing locations in India are not located within the vicinity of any identified / notified bio-diversity hotspots or protected water bodies. We have created water bodies / wetlands within our manufacturing locations using storm water runoff as a water conservation measure. A variety of avian fauna are seen throughout the year and migratory birds are seen in the winter.

At Pune Plant, a colony of Painted Stork (Mycteria leucocephala) nest throughout the year at the wetland created adjacent to plant. At Lucknow Plant, Blue buck (Nilgai), wild boar, common jackal and Indian porcupine are seen as they are commonly found in that region. The

presence of these fauna within and adjacent to our plant premises is indicator of a stable ecology. While the animal species observed at Lucknow are classified as 'Least Concern' <LC> in the IUCN Red List, the Painted Stork is classified as 'Near threatened' <NT>. We are working on developing a "Biodiversity Management Plan" with the help of experts across Pune, Lucknow and Jamshedpur locations in FY 2016-17. We also intend to leverage our presence in local communities where we are already engaged in Social Responsibility initiatives to identify and help conserve local and indigenous varieties of cereals and food grain.

# Human Resource Management

Sustainability is about raising the bar and connecting the dots! Our workforce is our biggest asset. Our organization is transforming and we have already set some path-breaking goals related to gender diversity, equal opportunity and decent work conditions to meet the changing business needs.



**Gajendra Chandel** Chief Human Resources Officer

Dedication and technical expertise of our employees is the root of our success. We put our best efforts to keep and attract the best people. In order to achieve this, we offer our people attractive and secure jobs, comprehensive development and training opportunities, and good longterm prospects. Our systematic career management for high-potential and managerial staff fosters and enhances the professional development, enabling us to fill key positions throughout our locations with qualified specialists.

We work together to explore how people's career and personal needs change as they move through different stages in their lives and how these changes can be managed. We strive towards strengthening diversity and providing development opportunities. As part of our human resources (HR) planning, we annually determine the skill sets we need based on our corporate and locational strategies and we align our young talent and further training programmes as well as our hiring plans accordingly. Being an equal opportunity employer, we do not discriminate between any employees on cast, creed,

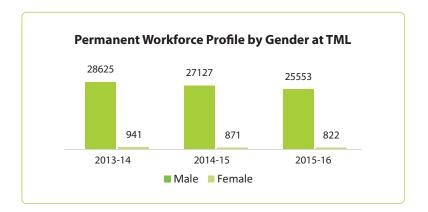
gender and ethnicity. The remuneration for any employee is strictly based on merit and is governed by the pay scale of particular grade.

We offer all statutory benefits to our employees such pension, gratuity, insurance and health benefits. TML employees can also avail accommodation in plants where we maintain our own townships. At Jamshedpur, for example, we operate schools, hospitals and other public amenities which can be availed either free or at a nominal cost by TML employees and their family members.

Our permanent workforce headcount at the end of FY 2015-16 was at 26,375 compared to 27,998 during the last fiscal year. Asour industry is experiencing a downturn we right-sized manpower across locations, functions & employee grades by implementing employee separation scheme during reporting period. The rate of hiring represented as total permanent employees hired as percentage of total permanent workforce for 2015-16 stood at 5.8% while rate of attrition for the corresponding period was 11%.

#### **Workforce Breakup at TML**

Employed by Catagory (TML)	As on 31.03.2016					
Employee by Category (TML)	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	785	291	1039	37	
Middle Management	1982	5327	728	7599	438	
Junior Management	920	1797	403	2897	223	
Non-Management	1763	9610	2769	14018	124	
Temporary Workers / FTCs	10368	3542	137	13274	773	
Apprentice/Trainees	11493	135	0	11045	583	



### Improving Gender Diversity

Our mission statement is "To facilitate a work environment that encourages diversity and is inclusive, respectful and appreciative towards all our employees". To constantly guide our efforts towards diversity in work environment, TML Diversity Council has been formed which comprises of the board of

members, ExCom and other senior management representatives. They constantly review the change in the diversity ratio and analyse the factors responsible for the alteration whether positive or negative. Also diversity related issues are tackled by the council which includes the complaints registered as well as measures implemented to sort out the issues.

# SheInspires-International Women's day Contest

SheInspires-International Women's day Contest was organized to develop and boost self confidence in the female employees. Also this contest helped employees to introspect new talents within themselves. Great interest and response was shown by the employees showing that the motive behind the program was achieved to an extent.

Traditional mindset that women cannot work in manufacturing sector has hindered women from getting technical education. As a result of this, fewer women enrol to study in Industrial Training Institutes (ITIs), as they don't see themselves getting jobs in manufacturing companies. Another misconception regarding this sector is about the complexity of job. It is assumed that women can't work in manufacturing as there is a lot of heavy lifting involved, but actually everything is mechanized and there are hauls and lifts that do all the lifting. With these technical advancements, women can be easily trained to work in manufacturing plants.

We have proposed a strategy in order to find out a remedy for this problem, in which they will be hiring 10th and 12th pass students directly from their villages instead of relying on just the ITIs. This step is initiated to reduce our reliance on ITIs for workers and aims to train people in its own training centres. We have signed a memorandum of understanding (MoU) with the government-recognized Automotive Skill Development Council (ASDC) for a collaborative skill development program in the automotive sector. This partnership will help us develop skill development centres across our six plants in India. Central government's recent step to amend Factories Act to allow women to work night shifts will also provide a boost to TML' initiative. This will help to improve the proportion of women in TML' shop floor from 3% to 20% in the next two years.

#### **Workforce Breakup at TML Subsidiaries-TAL**

Fundament Cotton	As on 31.03.2016					
Employee by Category	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	23	10	33	0	
Middle Management	6	40	62	106	2	
Junior Management	376	35	49	360	100	
Non-Management	0	55	62	117	0	
Temporary Workers / FTCs	4	0	0	4	0	
Apprentice/Trainees	67	0	0	67	0	
Average Contractual Labour	69	28	0	92	5	

#### **Workforce Breakup at TML Subsidiaries-TMLDL**

Employee by Category	As on 31.03.2016					
(Jamshedpur)	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	16	12	26	2	
Middle Management	58	124	29	206	5	
Junior Management	212	146	86	434	10	
Non-management	4	1013	517	1521	13	
Temporary Workers / FTCs	17	237	12	228	38	

#### **Workforce Breakup at TML Subsidiaries-TMML**

Employee by Category	As on 31.03.2016					
	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	4	0	4	0	
Middle Management	19	105	4	128	5	
Junior Management	121	89	1	211	12	
Non-Management	967	475	0	1442	2	
Temporary Workers / FTCs	208	8	2	218	3	
Apprentice/Trainees	460	1	0	461	18	
Average Contractual Labour	150	95	0	245	0	

#### **Workforce Breakup at TML Subsidiaries-TTL**

Employee by Category	As on 31.03.2016					
	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	86	38	121	3	
Middle Management	1	715	42	706	52	
Junior Management	1631	1655	21	2878	429	
Non-Management	0	0	0	o	0	
Temporary Workers / FTCs	325	127	17	392	77	
Apprentice/Trainees	0	0	0	0	0	
Average Contractual Labour	0	0	0	0	0	

In FY 2015-16, for TML 51 female employees took maternity leave while 54 female employees resumed work from maternity leave. This includes employees who had gone on leave in the previous year. Of the total number of employees who returned from maternity leave, 55 are still employed after 12 months of resuming, indicating 100% retention rate amongst employees who took maternity leave. For the subsidiary TTL, 263 male employees and 30 female employees availed parental leave during 2015-16. For other subsidiaries including TAL, TMML and TMDL Jamshedpur, 3 people took leave and all of them joined back to work. There are crèche facilities as well as superannuation allowance that help cater to the needs of a diverse workforce.

We respect the dignity of every individual and our code of conduct and Human Rights Workplace Policy embody our company's policy to deal fairly and honestly with our associates. We fully recognize the freedom of association, the right to organize, and the right for collective bargaining. 53% of total permanent workforce in TML are

unionized employees. We communicate major changes in our management to the labour union as agreed to in the collective agreement or relevant legislation. The union and management discuss key issues through a management-labour council meeting to find solutions. We also hold management briefings on a regular basis to keep the labour union up to date on the market situation and business practices.

At our Sanand plant, section of Permanent workmen went on a month long strike in Feb-Mar 2016 demanding reinstatement of 2 workmen suspended for misconduct in Dec'15 and 26 were further suspended during the strike. The strike ended with an agreement reached between Union and Management in presence of the labour department, Gujarat. Further the enquiries of these 26 workmen are being conducted by independent enquiry officers ensuring fairness in the matter. Management continues to engage positively with the union for smooth running of operations and long term participative management.

#### **New Hires at TML**

New Hires (TML)	1st April 2015 to 31st March 2016					
	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	59	14	71	2	
Middle Management	748	409	11	1082	86	
Junior Management	24	9	0	29	4	
Non-Management	40	221	2	242	21	
Total	812	698	27	1424	113	

#### **Attrition at TML**

Attrition	1st April 2015 to 31st March 2016					
	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	54	59	112	1	
Middle Management	609	721	104	1329	105	
Junior Management	148	127	63	304	34	
Non-Management	30	151	854	1009	26	
Total	787	1053	1080	2754	166	

#### **New Hires at TML Subsidiaries-TAL**

New Hires	1st April 2015 to 31st March 2016					
	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	11	9	20	0	
Middle Management	7	12	62	79	2	
Junior Management	180	7	49	140	96	
Non-Management	0	55	62	117	0	
Total	187	85	182	356	98	

#### **Attrition at TML Subsidiaries - TAL**

New Hires	1st April 2015 to 31st March 2016					
	<30 years	30-50 years	>50 years	Male	Female	
Senior Management	0	6	4	9	1	
Middle Management	5	3	18	24	2	
Junior Management	88	0	12	96	4	
Non-Management	0	0	10	10	0	
Total	93	9	44	139	7	

#### **New Hires at TML Subsidiaries-TMLDL**

Nous Hives (Jameshadmun)	1st April 2015 to 31st March 2016						
New Hires (Jamshedpur)	<30 years	30-50 years	>50 years	Male	Female		
Senior Management	0	0	0	0	0		
Middle Management	24	6	0	28	2		
Junior Management	27	1	0	27	1		
Non-Management	0	0	0	0	0		
Total	51	7	0	55	3		

#### **Attrition at TMLSubsidiaries - TMLDL**

Attrition (Jamshedpur)	1st April 2015 to 31st March 2016						
Attrition (Janisheupur)	<30 years	30-50 years	>50 years	Male	Female		
Senior Management	0	1	3	4	0		
Middle Management	14	7	3	20	4		
Junior Management	13	3	8	24	0		
Non-Management	0	15	102	114	3		
Total	27	26	116	162	7		

#### **New Hires at TML Subsidiaries-TTL**

New Hires (Pune)		1st April 2015 to 31st March 2016						
New Filles (Fulle)	<30 years	30-50 years	>50 years	Male	Female			
Senior Management	0	2	2	4	0			
Middle Management	0	51	1	49	3			
Junior Management	705	109	0	669	145			
Non-Management	193	34	0	192	43			
Total	898	196	3	914	191			

#### **Attrition at TMLSubsidiaries - TTL**

New Hires (Pune)	1st April 2015 to 31st March 2016						
New files (Fulle)	<30 years	30-50 years	>50 years	Male	Female		
Senior Management	0	11	2	13	0		
Middle Management	23	110	0	119	14		
Junior Management	288	62	0	304	46		
Non-Management	0	0	0	0	0		
Total	311	183	2	436	60		

#### **New Hires at TML Subsidiaries-TMML**

New Hires	1st April 2015 to 31st March 2016						
New nires	<30 years	30-50 years	>50 years	Male	Female		
Senior Management	0	0	0	0	0		
Middle Management	4	7	0	11	1 /		
Junior Management	32	3	0	35	1		
Non-Management	0	0	0	0	0		
Total	36	10	0	46	2		

#### **Attrition at TMLSubsidiaries - TMML**

Attrition	1st April 2015 to 31st March 2016						
Attition	<30 years	30-50 years	>50 years	Male	Female		
Senior Management	0	0	0	0	0		
Middle Management	3	15	0	18	0		
Junior Management	31	15	0	46	3		
Non-Management	25	14	0	39	0		
Total	59	44	0	103	3		

At TMML Dharwad, section of Permanent workmen under the influence of some external personnel, undertook some disruptive actions tarnishing the image of the company during Jan'2016 demanding reinstatement of 2 workmen dismissed for committing serious misconduct, revoking the suspension of few workmen who were involved in serious misconducts, apart from going on a flash strike on 31<sup>st</sup> January'2016. In response to this, as a demonstrative approach management notified the suspension of operations from 2<sup>nd</sup> to 5<sup>th</sup> February 2016 to prevent any untoward incidents. As there was no improvement in the overall situation, management was constrained to declare lock out with effect from 6th February. Subsequently, based on the intervention of District administration, Labour department and the

forward step taken by the employees to give a written undertaking on the maintenance of conduct and discipline lock out was lifted with effect from 7<sup>th</sup> March'2016.

Thereafter, management took various proactive steps in restoring the normalcy in the plant operations and continued the pending disciplinary cases. Later commenced the negotiations with the registered trade union representatives and signed long term wage settlement for a duration of 4 years and maintained an open and transparent approach in all the transactions apart from enhancing shop wise periodic communications, which enabled us to run the plant operations in a normal manner.

#### Labour Grievance mechanism

We strictly adhere to our policy of having no child labour and forced labour. All the security personnel have been trained to ensure no underage workers enter the plant premises and even our contractors are giving strict instructions which prohibit them to employ underage workers. For any operation the only exceptions to the 18 years age bar are those who are part of government approved apprenticeship schemes and internships. We remain committed to our well-established principles of strong and cordial relationship with our people, with fair,

employee-friendly policies at all times, but do not tolerate any indiscipline and coercive methods for unreasonable demands. All our employees at the time of induction receive training on our Company's policies and procedures which include references to human rights. All our security personnel are trained on TCoC including human rights aspects before they begin their duties as part of their induction procedure, a process managed by the Employee Relations (ER) department. We have conducted 22,670 hours of training on human rights topics for while collar employees of the organisation covering 57% employees as part of the training.

# **Training and Skill Development**

Developing targeted recruitment and training campaigns, building capacity and understanding in recruitment companies, and ensuring active engagement of line managers early in the recruitment process to ensure their buy-in are some of the activities that we have undertaken.

We provide a broad range of internal and external, formal, and other learning opportunities, including knowledge-sharing systems, coaching, and mentoring.

As a means of ensuring business relevance and value of learning offered, efforts are taken to closely align learning & development with business needs and priorities

through a learning governance body called as Learning Advisory Council (LAC). We have a multi-tiered LAC structure which has extensive and high quality formal training and development programmes, at the corporate unit and locational levels, covering specific functional skills, and broader business and leadership issues. LACs play a threefold role namely – designing, implementing and reviewing the learning agenda. All the employees of TML have their performance reviewed on annual basis.

Tata Motors Academy launched E-learning offerings for our managerial population and dealerpersonnel to drive a

culture of self-learning and make the learning process more inclusive and efficient. Our workforce undergoes formal performance management and development reviews on an annual basis. The remaining number of employees have access to a range of opportunities aimed at developing a workforce with the right skills, experience and training. Performance management among this segment is largely team-based. We also provide adequate assistance to superannuating employees in order to help them better manage career endings.

#### **Average Training Manhours at TML**

Average Training Manhours (TML)	Male	Female
Senior Management (EG and Above)	11.9	7.5
Middle Management (TM1 to TM5)	6	6.3
Junior Management (TM A/B/C)	48.4	41.9
Non-management(Permanent Blue Collar)	14.84	6.95
Temporary Workers / FTCs	63.66	23.88
Apprentice/Trainees	96.03	138.17

#### **Average Training Manhours at TML Subsidiaries**

Average Training Manhours	TM	LDL	TTL		TMML		TAL	
Average Training Manhours	Male	Female	Male	Female	Male	Female	Male	Female
Permanent Employees	5.35	6.85	0.1	0.1	14.6	5.1	5	10.3
Contract Labour	0.32	0.13	0	0	7.1	2	1.7	0.8
Temporary / Fixed Term Contract	1.29	2.05	0.1	0.1	14.8	4	1.0	0.0
Trainees / Apprentices	23.71	15.00	0	0	24.3	6	1.3	0.0

# Occupational Health and Safety

We are committed to provide a safe and healthy working environment for our employees and associates. A company-wide occupational health and safety policy exists in order to ensure increased vigilance and awareness on health and safety. A SHE committee of the Board of Directors is formed which meets on a quarterly basis and reviews the SHE performance. It reviews the SHE performance. A dedicated team for safety and health is instrumental in developing safer work procedures across

all the plant locations. The standard operating procedures at sites inculcate safety rules and procedures ensuring awareness and compliance at all levels. Every task undertaken at the site has its own set of safety hazards and hence specific safety procedures for these have been developed. Plant level sub-committees functionally report to corporate level sub-committees. Each CVBU plant head heads the corporate level sub-committee.

#### SHE review at different levels



Senior Management Level
Board of Director's Meeting,
SHE Committee of BoDs,
ExCom, StaffCom,
SHE Council, Steering
Committee, Corporate
level Sub-Committee



Plant Level / Unit Level Apex Committees, Plant Sub-Committees, Safety Committees



Factory Level
Factory Implementation
Committees

Emphasis is laid on creating a participatory governance model. SHE Councils are formed for the business units headed by Executive Director for CV business and the President for PV business. At the plant level, Apex committees are formed which are chaired by the Plant Heads. A total of 100 safety committees (Factory Implementation Committees) have been institutionalized across all the CV plants that meet on a monthly basis to review and improve the safety management system. Similarly, for PV there are 27 committees running to take on safety culture transformation agenda.

Safety Committees have been formed for warehouses and offices and focused audits are being conducted as per the plan by the Safety coordinators/ line managers which are in turn reviewed by the Safety Committees respectively as well as in the Steering Committees.

Various communications also cover Safety through address of Business Heads & Plant Heads, town hall meetings, mailers, reviews, videos etc. This also includes

communication with business/ channel partners (regional suppliers' meets/ dealer meets), contractors meet.

Our culture of putting employee welfare at the heart of our operations helps to ensure a high degree of safety norms. We place equal emphasis on safety processes and behavioural safety and we strive to create a positive safety culture towards achieving the ultimate goal of 'zero-injury'.

Safety is a primary focus area in daily management and parameters are part of the scorecard for senior leaders. Administrative officers, customer service heads, national dealer heads and warehouse heads get personally involved in taking safety initiatives in their respective areas. We continually strive to perform beyond compliance whilst positively influencing our value chain members to improve their safety standards. There is an increased focus on areas like training and awareness, safety observations, audits etc. to drive a positive safety culture.

# Aim

Enhance the safety standards at TML and develop a positive safety culture across the organization with an endeavour to be the best in safety and health in automobile industry in India

#### **KEY TARGETS**



- Stringent target of 10% reduction in Lost Time Injury Frequency Rate (LTIFR)
- Achieved LTIFR= 0.17 as against target of 0.18
- Our target for FY 16-17 is taken on TRCFR which is 15% reduction from last year. Target Total Recordable Case Frequency Rate (TRCFR)= 1.27

#### **DRIVERS**



Engagement at all levels

- · Senior leadership commitment
- Rewards & Recognition
- Training and awareness
- · Sharing and learning
- · Engaging & Influencing channel partners

#### Governance

- Audits and assessments
- SHE Review Meetings

#### Robust processes

- Consistent safety standards
- Timely incident reporting and investigations
- Horizontal deployment of learnings from incidents

#### Safe behaviour culture

- Road/ Driving Safety
- · Focused safety observations

#### **KEY INITIATIVES**



- Initiated Jagruti Safety Awareness Building Campaign for Workshop Managers
- Safety Infrastructure improvements in warehouses
- Robust Audit Mechanism
- Increased our scope of Campaigns(like road safety week, National safety month, etc.) for engaging our channel partners and supplier fraternity
- Continuous communication & awareness on lifestyle/ wellness, health promotional activities

Focus on contractor safety management, evaluation prior to awarding contract, reward and recognition, audits on field safety, communication.

# Creating an Organisational culture and Instilling Safe Behaviour

We are moving to the next stage of implementation where the employees' behaviour is being targeted. Seniors are involved in safety observation process, incident investigations, etc. which sets a good example to the employees of the commitment from the leaders. Employees are recognized for their contribution to safe work environment. We have rolled out 'Guidelines on Consequence Management for 'Safety Noncompliance'. This guideline aims to establish a framework for progressive disciplinary decision making, thereby ensuring a fair and transparent process for initiating such actions, which are intended towards changing behaviour. The kind of actions taken include training, coaching and counselling for different scenarios. A structured process of training has

been implemented for all levels of employees and associates.

Our Safety Excellence Journey has transformed the Safety culture. This journey focusses on:

- Continued engagement of senior leaders and middle management in Safety meetings and initiatives
- Identifying, developing and implementing High Risk Standards
- Propagating Safety Observation culture through a structured approach
- Fatality potential observations are closed with highest priority
- Training and capability building on Safety aspects
- Enhancing Contractor Safety Management

### Safety Excellence Journey

We have developed eighteen standards addressing the managerial, cultural, behavioural and technical aspects of safety. These standards include:

#### Sub- Committee Standards

- Safety Observations Standard
- Incident Investigation
- Contractor Safety
   Management

#### Phase-1 Standards

- Lockout Tagout
- Electrical Safety
   Management Standard
- Working at Height
- Safe Driving, Vehicle & Traffic Safety
- Personal Protective Equipment

#### Phase-2 Standards

- Lifting and Supporting of Loads
- Permit to Work / Hot Work
- Job Safety Analysis & Take2
- Management of Change
- Fire Safety
   Management

#### Phase-3 Standards

- Confined Space
- Machine Guarding
- Material Handling
- Hazard identification & Risk Assessment (HIRA)
- Emergency Preparedness

We have successfully completed second party audit for all CV plants for 5 Phase 1 standards. First party audits have been completed for 5 Phase 2 standards as well and second party audits are in progress.

### Defensive Driving Training (DDT)



Project Defensive Driving is one of the biggest training projects in the Indian automobile sector with a focus to improve safe driving behaviour of employees and contractors. TML aims to build a safe driving culture among its employees and contractors. Since the inception of the campaign in 2011, thousands of employees and associates have been trained on defensive driving through number of sessions across the organization. A 'Train the Trainer' program was conducted to train employees so as to build internal capacity to carry this training forward. TML was awarded by "Occupational Safety & Health, India Safety Innovation Award" as part of the OSH India annual international conference. Vendor and supplier drivers are also being trained

# Safety Review and Monitoring

The safety and health aspects are governed within the organization at different levels - from the senior leadership level to shop-floor level.

There is an online reporting system in place for safety observation process and incident investigation due to which there is an enhanced data integrity, speed and governance. Safety standards and procedures are available on the centralised portal for easy accessibility. Major incident announcements and High Potential incident (HIPO) announcements are sent to the 'Serious Incident Info' group that comprises of senior leaders. Employees are encouraged to report incidents that occurs and an indepth incident investigation is conducted, learning of which is shared with all employees. We have initiated learning & sharing for serious incidents and fatalities which happen in other Tata group companies. For Horizontal Deployment, as a way forward, we are working structurally, where we'll use the capabilities of our incident investigation online portal to communicate, track and close lessons learnt/ recommendations from incident investigations of intra-plant & inter-plant incidences and Tata group fatalities. The continuous efforts towards creating a positive safety culture have contributed towards reducing the overall lost time injuries.

However, we had one fatality during the year, which took place as a road incident during business travel of a sales personnel in Rajasthan. The fatality was investigated and appropriate mitigation measures have been put in place to avoid recurrence of such incident. For our subsidiary TTL

Pune, total number of recordable cases were 8 and no fatality was recorded.



**Senior Management Level**SHE Committee of Board of Directors, Corporate Steering

Committee (CSC)

IIIO

**Business Level** 

SHE Council, Steering Committee, Corporate Sub-Committees



Plant Level / Unit Level

Plant SHE Apex Committee, Plant Sub-Committees, Safety Committees



**Factory/Department Level** 

Factory Implemenatation Committees

Plant / site level committee: Broad based team – standard team defines activities, BBT converts to detailed implementation plan and shared with FICs. Examples of guidelines – mobile policy, CCTV, etc.

#### **Safety Performance of TML**

	TML					
Safety Performance	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16		
Lost time injuries (Nos.)	122	59	31	27		
Lost time injury frequency rate (per million manhours)	0.68	0.39	0.2	0.17		
Total recordable cases (Nos.)	448	228	295	236		
Total recordable cases frequency rate (per million manhours)	2.49	2.23	1.91	1.49		
Fatalities	1	1	1	1*		

<sup>\*</sup>Road Fatality of a sales employee during business travel

#### **Safety Performance of TML Subsidiaries**

	Safety Performance	Lost time injuries (Nos.)	Lost time injury frequency rate (per million manhours)	Total recordable cases (Nos.)	Total recordable cases frequency rate (per million manhours)	Fatalities
TMLDL	FY 13-14	7	0.72	35	3.61	0
Jamshedpur	FY 14-15	4	0.33	40	3.25	0
	FY 15-16	3	0.2	59	3.92	0
TMML	FY 13-14	1	0.39	5	1.94	0
Lucknow	FY 14-15	1	0.37	12	4.42	0
	FY 15-16	0	0	5	4.48	0
TAL Pune	FY 13-14	1	0.46	1	27	0
	FY 14-15	0	0	0	0	0
	FY 15-16	0	0	0	0	0
TAL Nagpur	FY 13-14	0	0	0	0	0
	FY 14-15	1	11.10	2	14.23	0
	FY 15-16	0	0	3	3.39	0
TMML Dharwad	FY 13-14	6	0.66	152	16.78	0
	FY 14-15	2	0.2	133	13.33	0
	FY 15-16	0	0	16	3.37	0

#### LTIFR& LDR at TML and Subsidiaries

	Lost Time Injury Frequency Rate (per million manhours)		Lost Da (per million	ay Rate n manhours)
FY 2015-16	Employees	Contractors	Employees	Contractors
Pune	0.17	0.21	4.21	5.88
Jamshedpur	0.22	0.09	5.14	5.98
Lucknow	0	0.21	0	12.79
Pantnagar	0	0	0	0
Dharwad	0.52	0	67.33	0
Pune PV	0.33	0.27	1.34	6.13
Sanand	0.52	0.36	6.81	3.62
TAL Pune	0.00	0	0	0
TAL Nagpur	0	0	0	0
TMLDL Jamshedpur	0.23	0	7.85	0
TMML Lucknow	0.98	0	0.78	0
TMML Dharwad	0.19	0	45.83	0

#### **Warehouse Safety Lead Indicators at TML (FY 2015-16)**

Parameters (↑Better)	Q1	Q2	Q3	Q4	Total
No. of Safety Meetings	29	30	30	31	120
No. of Safety Trainings	61	57	68	92	278
Near Misses Reported	197	202	219	231	849
Mock Drills	13	9	18	17	57

A consensus has been built with union that Safety of Plant, Equipments & the employees is of utmost importance and is as much the responsibility of the Union as of the Management to implement safe procedures and practices. The Union agrees to co-operate wholeheartedly with the management in making Tata Motors Plant sites an Injury Free Organization. The union shall support the Management to reach higher standards of Safety and Health by recognizing Safety as an integral part of the operations. The union further agrees that all the workmen

will wear the Personal Protective Equipment (PPE) and follow the safe working practices and not to violate any safety norms as may be fixed by the management from time to time. We have introduced a new Variable Payment Linked Performance scheme which is designed to pay the bargainable employees according to the performance of employees on Safety, Productivity and Quality parameters along with company performance measured in terms of Operating Profit

As stated in the TML Health & Safety policy, 'we also play an

influential role in upgrading the Safety standards of our business partners' that includes dealers, vendors, etc.; In this line, TML had a strategic partnership with M/s Castrol to improve the level of understanding of Safety of its dealer

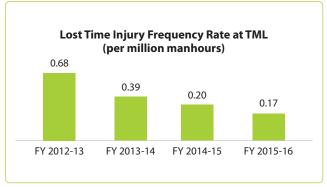


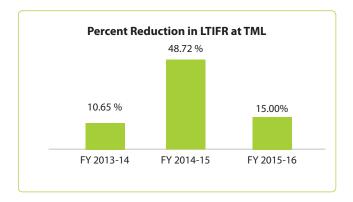
workshops. Jagruti – Safety Awareness Building Campaign for Workshop Managers is a yearlong campaign focused on building Awareness on Safety and understanding of Tata Motor's expectations on Dealers Workshop Safety (Safety MMS Manual). This programme is collaboration of TML, Castrol and training partner ICECD. The yearlong campaign aims to cover works managers/representatives of 2000 workshops (CV & PV) across India by January '17. As a part of this project, till date 693 workshops across India have been covered. In the vendor meet, as a part of Sustainable supply chain the process of communicating SHE expectations has been initiated by putting the expectations in the Supplier Relationship Management portal.

Jagruti Awareness Sessions				
Region	Total Workshops	Workshops Covered	% Covered	
CVBU				
North	425	199	199	
South	335	117	117	
East	327	59	59	
West	397	147	147	
Total	1484	522	522	
PVBU				
North	176	38	38	
South	185	70	70	
East	88	20	20	
West	149	43	43	
Total	598	171	171	

TML is helping the workshops to improve Safety, Health and Environmental (SHE) practices in their workplace, with a special focus on Safety. Minimum Mandatory Safety Standards have been developed to be followed by all Dealers workshops. Regular training and workshops are conducted for all the dealers across India. Also, there is a 7-point checklist which identifies 7 critical controls (Fatality potential mitigation actions) to be present mandatorily in all dealer workshops.

For this particular initiative, TML was awarded in 'Gold Category' by "Occupational Safety & Health, India Safety Innovation Award" as part of the OSH India annual International Conference.





For RSOs and warehouses, safety norms have been formed. Dedicated Safety Managers report to the head of Warehouses with functional reporting to Corporate SHE. Safety Committees have been formed in all the warehouses and focused audits are being conducted as per the plan by the Safety Managers which are in turn reviewed by the Safety Committee of the Warehouses as well as the Steering Committees. The performance of warehouses in safety is monitored in Spare Parts Division's & Customer Service's monthly review meeting.

As a support from TML to improve the safety performance of these focused vendors, a baseline audit was conducted, safety awareness trainings were imparted and awareness campaigns were run for Road Safety Week and National

### **Leading Indicators**

Training Man hours - Employees & Contractors

**Number of Safety Inspections** 

Number of Safety Observations Round

**Number of Safety Audits** 

Number of Near Miss Reports Received

Number of Mock Drills

Number of Industrial Hygiene Activities

#### Safety Month.

TML has created a list of Indicators that are tracked to gauge Safety performance. A list of these is given below. These Leading and Lagging indicators are collated and the same in the form of monthly Safety performance are sent to all the stakeholders. These are then reviewed in the various forums like SHE Council, Apex meetings, Sub-Committee meetings, etc. Types of analysis that are used are trend charts, why-why analysis, root cause analysis, frequency rate monitoring. Based on these performance reviews specific projects and actions are taken to improve Safety performance.

**Robust Audit Mechanism-** TML has First Party Audits (Intra-plant), Second Party Audits (Inter-plant) & Third Party Audits (External) system in place. 1st Party & 2nd Party audits are conducted basis SHE Audit Standard. External

# **Health Checkups**

PUnder preventive Occupational Health (OH) interventions, specific check-ups are conducted and complimented by awareness sessions through lectures and exhibitions. Enabling immunization, imparting first-aid and CPR (once in month for Jamshedpur's own employees and contractors) training and creating general health awareness amongst employees is an ongoing activity across the plants. Employees exposed to hazardous processes such as those working in paint shops or foundries are subjected to six monthly check-ups on specific tests like audiometry and spirometry. Apart from this, we also conduct work at height vertigo test for workers who are to work at elevated locations. No workers were identified to have occupational disease.

Health index is implemented across the manufacturing sites and it is effectively used for improving health of the employees by way of providing special attention and counselling. We have initiated an occupational health portal which monitors and records the health mapping and surveillance at Jamshedpur plant.

# Lagging Indicators

Number of Fatalities

Number of Lost Time Injuries (LTI)

Number of Restricted Work Cases(RWC)

Number of Medical Treatment Cases (MTC)

Number of First Aid Cases (FAC)

Number of High Potential Incidents (HIPO)

Number of Total Recordable Cases(TRC)

Lost Time Injury Frequency Rate(LTI-FR)

Total Recordable Case (TRC-FR)

Number of Road Related Incidents-Internal & External

Number of Fires - Major & Minor

Number of "Property Damage"

Number of Spills

Number of Occupational Illness Reported

Occupational Illness Frequency Rate (OIFR)

expert agency is engaged for 3rd party audits at plants. Plant SHE Apex monitors the timely closure of these audit findings. The findings of 2nd party audit are also monitored by Corporate Standards & Procedures Sub-Committee and SHE Council.

We have medical centres across all plant locations and external tie-ups with hospitals. It complies with statutory requirements such as biannual health check-ups for employees at plants. Workplace assessments by external agencies result in proactive actions such as preventive health check-ups and awareness programs.

'HealthPlus - Because you matter!' is launched to run its health initiatives. Series of initiatives like awareness sessions, mailers (E.g.- World Heart Day, World Health Day, World Diabetes day, National Occupational Health day) etc. have been conducted under this brand name. The Health and Wellness manual is a comprehensive manual not only to create awareness on matters related to health issues and services but also to provide a framework for dealing with these areas.

Several sessions and health talks by experts and specialists are organized on chronic and lifestyle diseases, example Swine Flu, Ebola, Know your Heart, etc., for the benefit of employees, especially women employees and their families. Health measures are reviewed at the top most level i.e. Board of Directors', CSC level as well as plant level and SHE apex level.

#### **Health Sessions at TML**

Health Sessions - Plant Wise (↑Better)	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Pune CV	20	18	80	88
Pune PV	2	1	5	10
Jamshedpur	20	24	24	22
Lucknow	18	25	27	30
Pantnagar	11	6	10	20
Sanand	16	21	24	20
Dharwad	21	27	45	42
Total	108	122	215	232

#### **Health Sessions for Women Employees at TML**

Health Sessions for Women - (↑Better)	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Pune CV	4	4	4	6
Pune PV	2	0	3	3
Jamshedpur	0	0	4	2
Lucknow	2	2	2	4
Pantnagar	4	3	4	6
Sanand	1	2	2	2
Dharwad	1	6	7	3
Total	14	17	26	26

#### **Health Index at TML**

Health Index - Plant Wise (†Better)	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Pune CV	10.51	10.49	10.86	11.71
Pune PV	11.36	12.13	11.42	11.86
Jamshedpur	NA	NA	10.35	12.18
Lucknow	NA	NA	NA	12.97
Pantnagar	12.63	12.31	12.58	12.10
Sanand	NA	12.87	12.48	11.00
Dharwad	NA	NA	12.12	12.31

# Value Chain Sustainability

Value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use. Automobile manufacturers have evolved from vertically integrated business models in which major manufacturing activities are carried out inhouse, to an assembly type business model in which most components are sourced from the supply chain. Automobile Supply Chains can be broadly classified into -Direct Material Suppliers (auto components fitted on vehicle) and Indirect Material Suppliers (consumables such as paint, pre-treatment chemicals gases, etc. used in the manufacturing process as well as other materials required for supporting processes). Automobile supply chains are characterized by technology driven suppliers of proprietary components (fuel pumps, tyres, adhesives, sealants, electronic controls etc.), well established tier structure inherent to manufacturing sector and large number of Small & Medium Enterprises (SME's).

TML has a comprehensive environmental management system in place which enables the company to produce high quality vehicles while minimizing the environmental

impacts of its activities, product and services. TML has increasingly developedfuel efficient vehicles to minimize the environmental impacts during entire life cycle of the vehicle. Development of next generation green vehicle is central to our 'FutuReady' strategy for meeting the future requirement of our stakeholders. It strives to optimally utilize the resources and due consideration is taken to ensure maximization of recovery, reuse and recycling of various materials during the end of life of vehicle and is actively supporting suppliers to become more competitive by supporting in development of new technologies while increasing the productivity. Producing safe and convenient automobiles with the highest quality is the core of TML's business operation and prompt service support given to customers matching their satisfaction requirements. Continuous efforts are undertaken to increase the fuel efficiency and develop innovative mobility solutions to reduce the GHG emissions. Dealers are supported to the fullest extent to build their knowledge and capacity to perform sales and also communicate to customers efficiently about our product and brand. TML places strong focus to improvise its logistics system which leads to reduced cost and improved efficiency.

Product Development

- Concept to launch
- In-house design of Vehicles, Aggregates and Integration
- Excludes design of proprietary parts

Parts and Aggregates and Raw Materials

- Source between 70-80% of parts fitted in vehicles
- Supplier base includes Direct, Indirect Material Suppliers and Service Providers.
- 2 Dedicated Vendor Parks at Pantnagar and Sanand.

Manufacturing

- 7 manufacturing plants within India
- Press, Weld, Paint, Aggregate Manufacture, Assembly

Sales & Distribution

- Customer touch points across India
- Domestic Business Dealers, Direct Sales
- International Business Distributors

After Sales Service

- Service Dealers and Tata Authorized Workshops
- Includes spareparts, aggregates, Annual Maintenance Contracts, Prolife (Aggregate Reconditioning)

TML Value chain comprises of five main components ranging from Product Development, Parts & aggregates and Raw Materials, Manufacturing, Sales & Distribution and After Sales Service. Product development deals with in-house design of vehicles, aggregates and Integration. This step does not include design of proprietary parts. Another component is Parts & Aggregates and Raw Materials which includes direct, indirect material suppliers and service providers. There are 2 dedicated vendor parks at Pantnagar and Sanand. Manufacturing component includes 7 manufacturing plants in India which manufacture both commercial and passenger vehicles. The main operations included are Press, weld, paint, aggregate manufacture and assembly. The other key component of the Automobile value chain includes Sales & Marketing and After Sales Service to ensure a superior customer experience through dealers and service touch points. Our large and diverse supplier base is periodically rationalized on the basis of performance and market requirements. TMLengages with dealers through an integrated CRM-DMS, which enables us to monitor finances and inventory at dealer level, and services, spares and complaints at the customer end.

# Supplier capability building through Project Sankalp

Project Sankalp is a supplier transformation initiative undertaken by TML in FY 2014-15. TML has several suppliers and there are numerous complaints from all plant heads, manufacturing heads and quality heads regarding the poor quality of parts being supplied by the suppliers across all locations. This may be due to weak processes control at suppliers end. Suppliers are not able to resolve quality issues due to lack of robustness in manufacturing process in addition to lack of technical knowhow. Besides this willingness to change, poor infrastructure, problems arising out of financial health & frequent design changes also results into part quality issues. Careful introspection concluded that there is need to change the mindset of suppliers and to take this forward, Project Sankalp was kicked off.

Project Sankalp is intended to benefit those Supplier Partners who are at the bottom of the pyramid in terms of quality, productivity and profitability through capability building, elimination of waste (rework, rejections, transit damages, etc.) conservation of resources and a better work environment thereby ensuring the business continuity. Cross functional teams which pools the expertise of several in-house functions such as Quality,

Manufacturing, Technical Services, Production Engineering and Kaizen are nominated as a Supplier Improvement Team (SIT) to closely engage and work with identified suppliers through capability building, waste elimination (rework, rejections, transit damages, etc.), resource conservation and improving work environment, hygiene and safety. Every plant is engaging their suppliers for this Capacity Building Programme.

Project Sankalp brought 90 supply points under coverage in 2015-16 as part of Supplier transformation journey. The program continued to focus on its basic approach of transformation through 6 pillar approach of Cleanliness, Safety, Health and Hygiene, Data Management, Quality, Supplier issue resolution.

In addition to the above, the program additionally involved 4 major interventions as a supplement to ensure the delivery of its planned objectives. The program encouraged the supplier partners to induct female employees primarily in supervisory and quality areas to leverage their strength in "Eye for Details" and "Orderliness". Some of the suppliers who noticeably benefited through this diversity approach are SFL, Youth India, Samarth, etc.

Welder Qualification process has been used as a major tool to develop skills and ensure we have a qualified pool as a part of 4M compliance. The program involved both theoretical and practical inputs. Each of the workmen was expected to prepare a sample as per the protocol of ASME. These samples were tested in TML to see that the product met its quality requirements. Workmen who could not pass went thru retraining and repeat of the qualification process. This has been a major foray to enhance the skill with coverage of more than 100 welders so far.

Another method used was knowledge enhancement of Foundries through community approach of learning and sharing. A total of 28 foundries were brought under a branded program "Project Vihaan – A new beginning" in three batches at Jamshedpur, Pantnagar and Pune and this was specifically designed by analysing the data that showed most of the foundries have issues around sand and metallurgical composition. The program envisaged an SME speaking to the technical team of these foundries and creating a forum where the Foundry as a community can learn and share from each other. The program saw intense discussion and found solutions to the problem through the community approach.

Another initiative was that the suppliers were enabled to know the relevant technical information including drawings of the product without seeking any help from anybody in the value chain. The program provides a secure direct access to all the  $\sim$ 1300 supply points concurrently through the SRM platform. The time-bound program of

Project Sankalp is planned to conclude by March 2017. For Pantnagar plant, project Sankalp was awarded at PERP 2015.

### Project Sankalp at Sanand

At Sanand plant, Project Sankalp is being run by a cross functional team. Sanand team has identified 3 suppliers for which they have initiated different capacity building programs. The benefits of these suppliers has been ₹ 8,72,700. The training program included skill development of Manual Painting, Safety Flame-De-Flashing and Blower Implementation at TACO site; Sufficient Lux Level, Blower Implementation and Safety at Wield Shop at Rucha site and Blanking line Reduction of Rejection at Caparo site.

Total savings generated by suppliers is mentioned as follows:

No.	Supplier	Category of Initiatives	Details of Initiatives	Potential savings	Savings (in ₹)
1	JBM		Space saving by shifting obsolete tool & dies (114nos)shifting TML	350 Sqmetres space saving	3,68,700
2	TACO- IPD	Material /Space (Area) Saving	Nano My 13 Wheel arc liner Frt& RR -Drawing calls for Recycled PPCP Usage virgin PPCP	Material saving	2,88,000
3	Rucha		Material saving realisation through small piercing scrap collection	12 Ton scrap collection	2,16,000
Total Savings					8,72,700



### Project Sankalp at Lucknow

Lucknow team has identified 4 suppliers (M/s Sharada Industries, M/s LD Joshi, M/s Mitter Fasteners and M/s Berry Auto) for which they have initiated different capacity building programs. The capacity building programs includedProductivity/Rework reduction, House keeping, Out Bound Logistic, Energy conservation, Production, planning & control and Process Improvement. The benefits of these suppliers has been ₹ 6,745,000.

No.	Supplier	Category of Initiatives	Savings (in ₹)
1	SHARADA Industries	Productivity/Rework reduction, House keeping, Out Bound Logistic and Energy conservation	3,351,000
2	LD Joshi	Productivity/Rework reduction, House keeping, Production, Planning & Control and Energy conservation	1,401,000
3	MITTER FASTENERS	House keeping & Energy Conservation	549,000
4	BERRY AUTO	House keeping & Process Improvement	2,845,000
Total Savings			8,146,000

In addition to project Sankalp, Lucknow team has also implemented following Green Supply Chain initiatives:

- Implementation of logistic initiatives such as optimization of vehicle loads, direct shipment to TML/warehouse, routing of distribution and reverse logistics
- Consolidation centres have been developed to maximise truck utilization and minimise vehicle movement and carbon foot print in the plant
- Vehicle Fitness and Pollution Certificates are checked by our Security Dept. at Gates and then only vehicles are allowed to enter the TML premises.
- Elimination of plastic packaging by introducing dedicated Binsin various bracket Parts family.

# Conflicts Mineral Management

The United States Dodd-Frank Act, Section 1502, is a landmark legislation that requires manufacturing companies to identify and disclose to the U.S. Securities and Exchange Commission (SEC) the source of 3TG minerals (tin, tantalum, tungsten and gold) used in their products when those minerals originate from or around the war-torn region of the Democratic Republic of the Congo (DRC).

As a Securities Exchange Commission (SEC) registrant, we need to be in compliance with the requirement of the aforesaid section. In this regard, we have developed company-wide Conflict Minerals Policy and have a Conflict Minerals Compliance Program in place to implement our Conflict Minerals Policy. This is necessitated since auto components/sub-systems sourced by TML may have 3TG minerals.

# Packaging & Logistics Management

Integrated packaging design process arises as one key factor that could contribute in increasing the efficiency and sustainability of supply chains. This approach is called "packaging logistics" which means the process of planning, implementing and controlling the coordinated packaging system of preparing goods for safe, secure, efficient and effective handling, transport, distribution, storage, retailing, consumption, recovery, reuse or disposal combined with maximizing consumer value, sales and hence profit.

P&SC has initiated global actions centrally for optimizing logistics, packaging, cost, and reducing damages to auto components. Several factors such as labour, material flow, pull systems, layout, cost, safety, ergonomics etc. are considered before finalising the design of packaging and labelling. Returnable type of packaging such as

polypropylene boxes is gaining more importance over single use type of packaging. This is done to achieve reduction of expendable packaging dunnage for components such as fender, rear wall, dashboard, fuel tanks etc. For heavier components, returnable and foldable steel bins, pallets, trollies, plastic bags are used. Also wood packing is replaced by steel rack packing design.

Other step in this direction included setting up of consolidation centers at key geographical locations across the country to streamline material receipt in-line with production plans. 'Milk Runs' for local runs were established in Kolhapur region for Pune CV, Pune Belt for Pune PV, TML Dharwad from Pune etc., in which transport vehicles collect components from suppliers as per requirement and transport to our manufacturing plant, which avoids use of multiple vehicles and material handling. To optimize number of trucks entering the manufacturing plants, special containerized vehicles (32' & 52') were introduced for optimum payload utilization.

"Green supply chain" initiative was taken up as a part of CII Green Co Assessment in 2014 to evaluate the environmental performance of the organization. Energy and environment related data were collated from selected suppliers and analysed which provided an insight into best practices in environment management. In future we aim to increase our reporting boundary to include our suppliers sustainability performance and evolve supplier selection criteria to include sustainability parameters. Selected suppliers will be encouraged to undergo CII-Green Co assessment through resource conservation and improved profitability.

# TML among top four of India Responsible Business Forum (IRBF) Index, 2015

IRBF Index 2015, an initiative by Oxfam India in partnership with Corporate Responsibility Watch, Praxis and Partners in Change, evaluated inclusiveness of suppliers/vendors in the sustainability journey of organization with focus on priority to local sourcing, safety, health, environment and ethical work practices at suppliers end. TML was ranked fourth out of 99 companies evaluated by IRBF<sup>8</sup>.

### Sustainable Supply Chain

To increase the awareness among suppliers on Environmental, Social and Governance issues, and to improve the Sustainability performance, Sustainable Supply Chain Initiative has been taken up. In the month of January and February workshops were conducted on Carbon Footprint Measurement & Mitigation at Pune and Lucknow plant which was attended by more than 230 suppliers. During the last quarter of the year more than 150 suppliers were made aware of the importance and expectations of Sustainability in Supply Chain in Passenger vehicle and Commercial Vehicles Vendor Meets. This year a GHG Tool spreadsheet was shared with suppliers for CO2 estimation for their own units and so far 6 suppliers have come up with their GHG data. TML has planned to monitor and track sustainability performance of selected critical suppliers in next 2-3 years.

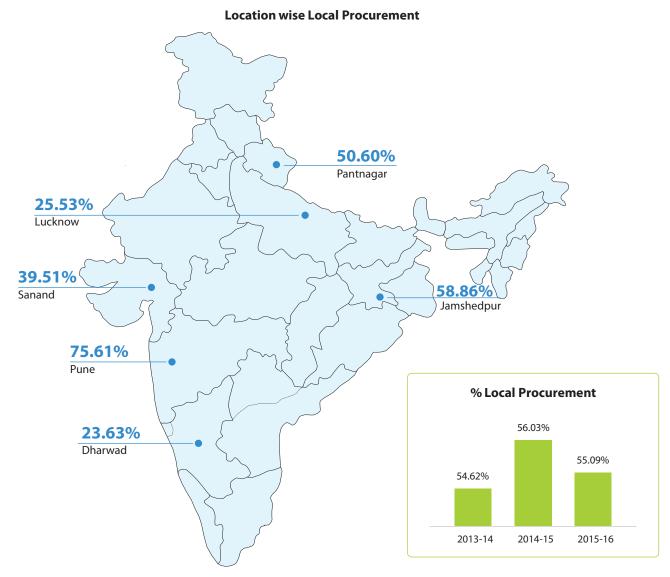
CII-GreenCo initiative- a Green Company Rating System framework created by CII to assess and evaluate the environmental performance of an organizationwas taken forward this year to supply chain by identifying 2 Suppliers and handholding them for GreenCo implementation.

# Value Chain Engagement

With the launch of Tata Motors Integrated Supplier Quality Manual, the supply quality process is further strengthened. The manual provides a common 16 step process to ensure that TML requirements are complied with by all partners and highest quality standards are achieved. TML have also established vendor councils in 4 regions-North, South, East and West of India. These councils provide a platform for top level management and suppliers to interact. Periodic vendor meets are also held at every location to communicate on key issues like- supply schedules, quality and vendor ratings.

On-site vendor audits are carried out in which safety, health and environmental issues are taken into account. Engagement with dealers is done through periodic National Dealer Council, Regional Dealer Councils and Annual Dealer Conference and these interactions serve as a platform for discussing strategic and tactical plans for business growth.

 $<sup>^8 \</sup> http://www.livemint.com/Companies/xzYxZpbtBtCvqoLqlhwupO/India-Incs-policies-for-supply-chain-not-robust.html$ 



# **Local Sourcing**

7 manufacturing plants across India source material from hubs located in north, west and south of the country and hence promote the local industry and community. To establish the supply chain base at green-field locations, vendor parks were set up at Sanand at Pantnagar. All these steps have resulted in the growth of the local economy and have reduced logistic complexities and have minimized packaging and transportation. In FY 2016, our manufacturing plants sourced 55% of materials and services by suppliers based within the state where our plants are located.

# TCoC for Dealers and Suppliers

TML has a dedicated code of conduct for suppliers as well as dealers. All the suppliers are expected to adhere to the Principles of TCoC such as products & services, regulatory compliance, bribery & corruption, human rights, gifts & hospitality, health & safety, environment, conflict of interest, third party representation, protecting





company assets and reporting violations mentioned under the Supplier Code of Conduct. In addition to all the above mentioned principles, Dealer code of Conduct includes the aspect of Fair competition as well. TCoC has been communicated to dealers and suppliers and are expected to ensure compliance. Dealers and suppliers can notify TML about their ethical concerns and grievances to ethicsoffice@tatamotors.com

# Community Development

The values of corporate citizenship for TML are derived from the parent Tata Group. The journey of our community development programs began with the commencement of our first manufacturing operations at Jamshedpur in 1950s. Going ahead on the same path, we facilitate various developmental projects for the communities in which we operate.

Our four pillars of community development; Health (Arogya), Education (Vidhyadhanam), Employability (Kaushalya), and Environment (Vasundhara) have been strengthened in this year by increasing the scope and reach of our CSR programs. These programs are aimed at building human capital and bringing in an inclusive growth for the communities. The focus of our programs has been to increase the efficiency and effectiveness of the CSR programs through inclusive innovation. The projects are designed and implemented to make the rural areas self-reliant to meet their basic needs and lead a quality life.

Through regular consultation with internal & external stakeholders and participatory approach, we develop comprehensive sustainable solutions for the communities. Our community intervention aims to solicit active participation from local communities, government and NGOs. To achieve this, we form multi-stakeholder partnerships which helps us in developing robust and high impact CSR programs. Our strong commitment to CSR is further visible from our Affirmative Action program. It is primarily focused on facilitating direct/indirect employment for the SC/ST personnel thus encouraging their positive discrimination. Also to further improve our CSR performance, we undertook the SROI study for our programs. Through our strategic partnerships with NGOs, technical training institutes and the concerned government departments, we aim to remove the social inequalities in the communities thus enabling their overall development.



12th of May 2016 was a proud moment for Ms. Y. Shailaja, Officer, CSR (Health) who was conferred with prestigious Florence Nightingale Award from Honorable President of India. She was nominated from state of Jharkhand for her services in community health. Florence Nightingale Award is one of the most prestigious award in area of nursing instituted by Ministry of Health and Family Welfare, Government of India.

After 20 years of dedicated service in various departments of Tata Motors Hospital, Ms.Y.Shailaja opted for community based health services through CSR function of Tata Motors, Jamshedpur. Since 2011 she is working in area of leprosy eradication and rehabilitation of leprosy patients, Her selfless service for leprosy patients ranges from, nursing care of old age ANTYODAY HOME inmates to mainstreaming of children of leprosy patients with formal schooling and vocational skill building. She is also involved with David and Lucile Packard Foundation supported "RISHTA" project for awareness and life skill education among youth and adolescents.

She is actively involved in academic initiatives as well. Her scientific paper on the "Issues and challenges faced by rural nurses in delivering effective

nursing care" was selected for Biennial Conference of National Trained Nurses Association of India. Another Technical Paper from her, alongwith 2 other nursing supervisors, on the effective Kangaroo Mother Care for low birth weight babies presented at CII National Supervisory Skill competition in 2011 received 3rd prize.

She is also a recipient of ACES award from the hands of the then MD, Tata Motors in May'13 for initiating employability enhancement training programme for deprived youth of the community.

# Arogya (Health)

Our Approach to improve health in communities are aimed at providing preventive & curative health services in the community, focusing on maternal & child health for malnutrition treatment and prevention and provision of sage drinking water under Suman Mulgaonkar Development Foundation (SMDF). Through our previous experience of running Malnutrition treatment centre (MTC), we developed comprehensive program for malnutrition treatment and prevention. We extended our curative and preventive services through medical camps and health awareness programs. In FY 2015-16, more than 178,200 people benefited from our health programs.



#### Malnutrition Treatment Centre

A 16 bedded malnutrition treatment centre in partnership with department of health and family welfare is functional under TML CSR initiative. Severely malnourished children from nearby villages are referred by frontline health workers. These children are provided with specialized treatment and care to attain a healthy status during their stay of 15-20 days at malnutrition treatment centre. In year 2015-16 total 131 children were treated at this centre and more than 800 children are treated till now since its inception.



#### Health initiatives for Drivers

Drivers community being one of the most important stakeholders, were included in CSR initiatives after conducting a dip stick survey. During the survey it was a finding that more than 60% of drivers have never undergone any health check-up. Simultaneously, more than 70% of drivers, had tobacco and alcohol consumption history. Under Arogya program health camps for drivers were organized where more than 900 drivers underwent health check-up during year 2015-16. They were given a health card with details of their health status based on key health indicators.



# TML and Swachh Bharat Abhiyan

In response to Honourable Prime Minister's appeal of Swachh Bharat Abhiyan, TML committed itself for construction of toilet blocks in three schools, covered under Vidyadhanam. Focusing on girls sanitation, Agarkar Girls High School was identified as one of the needy school by 'Swa-Roopwardhinee' (partner NGO for implementing Vidyadhanam programme). A participatory process was put in place where the design of the toilet block, colour of tiles etc was finalized after interaction with teachers and students.

A partially functional toilet block was converted into a fully equipped toilet block. 8 toilet blocks were constructed costing 5.50 lakhs. As a part of 'Karyanubhav' all students were taught to prepare detergent and sanitizer which will be used for maintenance.

# Amrutdhara- Safe drinking water project at villages

This initiative, implemented through SMDF is aimed at resolving the drinking water issues and providing customized solution to communities on priority basis. The contribution from member employees and TML is used to fund the identification and deployment of high impact projects in local communities. The measure of our success is evident from 100% membership for SMDF for all our 6 manufacturing locations. Under the National Rural Drinking Water Scheme, we are making concentrated efforts to bring water to the water scarce villages of the country. Till date, we have provided potable drinking water solutions to 130,000 people living in 315 villages across the country. This program has made available drinking water to drought prone villages and also eased the life of villagers affected by scarcity and accessibility of water.

# Vidyadhanam (Education)

This initiative aims to improve the quality of education in schools by supporting for infrastructure, skills development, training and scholarships. The Adult literacy classes at Beyangbil, Jamshedpur has helped women to learn the basic alphabets enabling them to form self-help group. Vidyadhanam scholarships are awarded to students belonging to disadvantaged social and economic background. Our approach to improve education includes:

- Providing necessary physical infrastructure in schools.
- Scholarship assistance to meritorious and deserving students.
- Conducting special coaching classes for students to develop expertise in particular subjects
- Conducting co-curricular activities for overall personality development.

During the year, 51000 students were benefitted through our education program.



### School for special children

A school for special children ASHA KIRAN is being supported by TML under Vidyadhanam Asha Kiran was established in 1978. The school is being managed by AIWC(All India Women's Conference) a women's organization. The students are taught in the school till they attain an age of max. 19 years while they undergo life skill education to lead a meaningful life. After that they undergo a vocational skill training at skilling center to attain vocational skills to earn their livelihoods.

### TML and NTTF launch Skill Development Program under NEEM



TML in association with Nettur Technical Training Foundation (NTTF) launched the 'National Employability Enhancement Mission (NEEM) – a nationwide skills enhancement initiative of Government of India. This initiative offers 2 year – certificate programme in automobile manufacturing, under the aegis of AICTE. The initiative aims to enhance employability through an objective of learn and earn, under which TML will bear all the expenses of training cost, fees of the selected candidates during the period of training.

**Mr. Gajendra Chandel, Chief Human Resources Officer, TML,** said, "We are keen to see the Indian industry becoming globally competitive with TML playing a significant role in building right set of talent pool for the Engineering & Manufacturing Industry and to promote employability through on-the-job training. TML is committed to build world-class skills including a mind-set of best-in-class quality, benchmark productivity, safety and discipline. The NEEM program, keeping in line with Indian Government's 'Make in India' initiative and our commitment to development of the local communities, will focus on building up the technical skill levels of fresh students and create industry-ready, skilled candidates."

# Kaushalya (Employability)

Considering the fact that our country faces a considerable skill development challenge, we embarked our skill development journey in partnership with wide range of stakeholders to enhance employability of youth mainly in automotive trades. Our approach focuses on developing partnerships with NGOs and it is to offer technical training assistance, capacity building through train the trainer program, skill development of communities in agriculture and allied activities and training of youth in automobile and other demanding vocational trades.

To enhance training quality, we have developed standardized course content for automotive trades –

mechanics and driver training, partnered with reputed NGOs having previous experience of running skill development program, build capacity of partners through train-the-trainer and management development programs and provide practical exposure to students through on-the-job trainings and industry visits.

We have developed one-year training programme to train youth as mechanics. During this programme, students not only undergo classroom training but they also get practical hands-on experience of working in TML' authorised dealer workshops. These students are paid a stipend which is sufficient to cover training expenditure.

During the year, we have skilled 73000 youth in various marketable vocational trades.



#### Lab to Land

CSR Team of TML has identified 7 tribal dominated villages to be developed as model villages. Villages being primarily dependent on agriculture and allied activities for their livelihood are in search of such opportunities where the farming practices could be taken to the next level where mere livelihood option could turn into ways of prosperity. TML supported Flora Horticulture Society with technical expertise in horticulture and agriculture and allied activities came forward with their willingness to transfer technical know-how to these farming community. Utilizing this opportunity 7 divisions of TML Jamshedpur eager to contribute for social causes through volunteering came forward to adopt these 7 villages to mentor these farming communities to build a path of prosperity. The initiative has been named as "TML Lab to Land" Program. The project is benefitting more than 200 farmers from 7 identified tribal villages.

#### TML Trains over 200 School Bus Staff in Pune





Furthering the company' nationwide initiative to train school bus staff on aspects of safety during school bus travel, TML conducted its 'Hamare Bus Ki Baat Hai' campaign for over 200 school bus staff of VIBGYOR school branches in Pune. An interactive training program, 'Hamare Bus Ki Baat Hai' includes sessions to sensitize school bus staff on the importance of their duties, how to act in case of an emergency, including softer aspects of personal hygiene and how to better interact with parents and their kids, while on the job. The program also aims at sensitizing school children and their parents on how to prevent and minimize accidents school bus travel. TML has trained over 10,700 school bus staff, across 47 cities, from 224 schools, through 226 sessions, under the 'Hamare Bus Ki Baat Hai' school bus safety program. Additionally, TML also conducted activities for children, to make them aware about the importance of safe school bus travel through two other initiatives - 'Dream it to Win it' and 'Safety Hamare Bus Mein'.

#### Vasundhara (Environment)

Our Approach to improve environment included promotion of renewable energy, tree plantation to increase green cover, construction of water conservation structures and building awareness amongst the community members. 67000 saplings have been planted and our various programs under this initiative and 12600 people participated in environmental awareness programs.

#### Improving village infrastructure

The CSR team constructed 470 metre of drainage and 810 metre of pavement in partnership with the village panchayats. These initiatives have improved interconnectivity among the villages andhave ensured greater cleanliness. In the last 10 years, the plant has constructed around 7000 metre of paved roads and 1500 metre of drainage system in the villages.



### **Model Villages**

In 19 villages of Jamshedpur and Potka blocks, 16485 people were covered from 4622 households through door to door survey. Approximately 49% of population from these villages belongs to SC/ST community. Data pertaining to 3 focus areas of CSR i.e. Health, Education and Employability were collected and collated. The final analysis of data, led to a conclusion that 7 of the villages with more than 80% tribal population (minimum 72.07% and maximum 100%) and more than 50% of BPL households (minimum 40.7% and maximum 92.9%) would be focused for impactful interventions in first phase. 3 thematic areas i.e. Health, Education and Employability are the key areas of intervention for 3 years. Based on the baseline data a development index was devised and the initiatives were so designed so as to achieve a threshold of 8/10 index value at the time of withdrawal after 3 years. During the baseline study the cumulative index value of these 7 villages was 3.1 which have gone up to 5.9 after two and half years of intervention.



### Lift Irrigation

East Singhbhum villages are primarily inhabited by farming community. During a base line study and while referring secondary data, lack of perennial irrigation (less than 7% of farming land) was found to be key problem for farming community.13 Lift irrigation facility as a solution for perennial irrigation were provided to more than 500 farmers and providing perennial irrigation to more than 520 acres of land including 2 lift irrigation projects implemented in 2015-16, benefitting 72 farmers and covering 68 acres of land. The initiative resulted in an average 4-5000/month increase in income of beneficiary farmers.

#### Other Initiatives

# Seva (Employee Volunteering Program)

TML has continued its vibrant culture of volunteering by employees and their families. Our employees volunteered to visit tribal schools, old age homes, NGOs, conducted safety sessions in schools, Under the Tata Engage program, 25% employees of the company have participated in the community development programs. We won awards in the Tata Volunteering Week for Maximum Number of Activities Conducted, highest percentage of employee participation and Highest Number of Volunteering Hours.



# Seva-Taking Volunteering a step Ahead

Team of volunteers from JLR GSO (UK) and GDC renovated kitchen at Manavya which is a home for HIV +ve children. The project is joint venture of volunteers from JLR GSO(UK), team from GDC and construction department. Volunteers from GDC regularly visit Manavya and conduct recreational sessions and vocational guidance session. Theme based relationship building activity "GDC Knows my children" is in progress, wherein GDC team members would interact with assigned children and mentor them in their fields of interest.

# Affirmative action program – Towards inclusive Growth

Our Affirmative Action Program is developed on the lines of Tata Group's Affirmative Action Policy which specially focuses in mainstreaming marginalized communities-SCs and STs. Education, Employability, Entrepreneurship and Employment are the four focus areas of our Affirmative Action program.

#### **Education**

During the year we have given 911 scholarships to SC/ST students and 1 FAEA scholarship for higher studies. 14,350 SC/ST students benefitted from school support program including coaching classes, teacher's training, co-curricular activities and infrastructure development.

# The state of the s

#### **Educational Excellence**

TEAM CSR in association with TQMS has started the Journey of Excellence for the schools supported by Shiksha Prasar Kendra under the banner of Tata Education Excellence Programme (TEEP).

TEEP is a three tier excellence journey for schools at different levels viz. Application writing, Basic Workbook and Saral Workbook. The Mission of TEEP is to continuously strive to develop intellectual and moral virtues in every student. TEEP framework helps the school plan, perform, measure results and lead towards becoming better by embedding the act of excellence. The framework has been benchmarked with the best body of knowledge available worldwide in the area of education. TEEP assessment was conducted in 8 semi urban and rural schools for promoting Educational Excellence. All of the schools improved upon their last year's score and 3 Hindi Medium schools from basti could graduate to next level of educational excellence journey

### **Employability**

Poor academic performance and lack of exposure leads to many times SC/ST youth not selected for our in-house apprenticeship training program. This year we started coaching students appearing in in-house apprenticeship training exam. Due to persistent efforts by training division, presently 24% of apprentices recruited under various schemes are from SC/ST community. During the year we have trained 9652SC/ST youth in various skills, such as mechanics, driving, fitter, and beautician.

# Entrepreneurship

We have successfully continued our partnership with DICCI (Dalit Indian Chamber of Commerce & Industry) to identify goods and services that can be procured from SC/ST vendors. We have initiated benchmarking process to set long term (3-5 years) for extending amount of business to SC/ST entrepreneurs against overall business extended to TML suppliers. During this year we associated 10 new SC/ST vendors in our supply chain and extended business of ₹ 979 lakhs to them.

#### **Way Forward**

A unique feature of our CSR strategy is that our initiatives help and individual to grow at every step of his or her life. In coming year, we sim to augment the quality of our CSR programs. To enhance the impact of our programs, we have taken some measures like introducing technology to monitor, document and increase efficiency of our programs.

To reach out to people in need, it is imperative for us to forge new collaborations, be it technical, educational or implementation. With an aim to draw from each other's strengths, such partnerships go a long way in developing sustainability of our programs, touching greater number of lives.



# Independent Assurance Statement

**DNV-GL** 

#### INDEPENDENT ASSURANCE STATEMENT

#### Scope and approach

**Tata Motors Limited** (TML or 'the Company') commissioned by **DNV GL Business Assurance India Private Limited** ('DNV GL') to undertake independent assurance of the Company's Sustainability Report 2015 -16 in its printed format (the 'Report') for the Financial year ended 31st March' 2016. Our responsibility in performing this work is regarding verification of Sustainability performance disclosed in the Report and in accordance with the agreed scope of work with the management of the Company. The intended users of this assurance statement are the management of the Company. Our assurance engagement was planned and carried out during August to October' 2016.

The assurance engagement was carried out against AccountAbility's AA1000 Assurance Standard 2008 and we performed our work using DNV GL's assurance methodology VeriSustain<sup>TM1</sup>, which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements (ISAE) 3000 Revised\*, along with AccountAbility's AA1000 Assurance Standard 2008 ((AA1000AS (2008)) and the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines Version 4 (GRI G4).

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We are providing a Type 2, Moderate level of assurance based on ((AA1000AS (2008)). We evaluated the performance data using the reliability principle together with TML data protocols for how the data are measured, recorded and reported. The performance data in our scope of work was the verification of the qualitative and quantitative information on sustainability performance disclosed in the Report covering Economic, Environmental and Social performance of the activities undertaken by the Company over the Reporting period 1st April'2015 to 31st March'2016 and based on the GRI G4.

We understand that the reported financial data and information are based on data from TML- Annual Report and Account for year ending 31<sup>st</sup> March' 2016, which are subject to a separate independent audit process. The verification of financial data taken from the Annual Report and Accounts is not within the scope of our work and no external stakeholders were interviewed as part of this assurance engagement.

# Responsibilities of the management of Tata Motors Limited and of the Assurance Providers

The Management team of TML have sole responsibility for the preparation of the Report and responsible for all information provided in the Report as well as the processes for collecting, analysing and reporting the information presented in the printed Report.

In performing our assurance work, our responsibility is to the management of TML; however, our statement represents our independent opinion and is intended to inform outcome of our assurance to the stakeholders of TML. DNV GL provides a range of other services to TML, none of which constitute a conflict of Interest with this assurance work. This is the 7<sup>th</sup> year that we have provided assurance of the full Report.

DNV GL's assurance engagements are based on the assumption that the data and information provided by TML to us as part of our review have been provided in good faith. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

<sup>&</sup>lt;sup>1</sup> The VeriSustain protocol is available on dnvgl.com.

<sup>\*</sup> Assurance Engagements other than Audits or Reviews of Historical Financial Information.

### **DNV-GL**

#### **Basis of our opinion**

A multi-disciplinary team of sustainability and assurance specialists performed work at corporate office and Site Levels of TML. We undertook the following activities:

- Review of the current sustainability issues that could affect TML and are of interest to identified stakeholders;
- Review of TML approach to stakeholder engagement and recent outputs although we have no direct engagement with stakeholders;
- Review of information provided to us by TML on its reporting and management processes relating to the Principles;
- Interviews with selected Leadership team, and senior managers responsible for management of
  sustainability issues and review of selected evidence to support issues discussed. We were free to
  choose interviewees and interviewed those with overall responsibility for the programmes to deliver
  the TML's Sustainability targets for medium and long term Vision, Mission and milestones;
- Site visits were conducted in TML Corporate Office at Mumbai, Pune Plant (both Commercial Vehicle & Passenger Vehicle Business Unit), including TAL Manufacturing Solutions Limited (100% direct Subsidiary) and Tata Technologies Ltd., Pune (72.32% direct subsidiary), Lucknow plant including Tata Marcopolo Motors Ltd., Lucknow (51%:49%, Joint Venture) and Sanand Plant (Passenger Vehicle Business Unit) to review process and systems for preparing site level sustainability data and implementation of sustainability strategy. The sites we visited were selected on the basis of their materiality to the group for environmental impacts as well as to give a geographical and divisional spread;
- Review of supporting evidence for key claims and data in the Report. Our checking processes were
  prioritised according to materiality and we based our prioritisation on the materiality of issues at a
  consolidated corporate level;
- Review of the processes for gathering and consolidating the specified performance data and, for a sample, checking the data consolidation; and
- An independent assessment of TML reporting against the Global Reporting Initiative (GRI) G4
  Guidelines.

During the assurance process, we did not come across limitations to the scope of the agreed assurance engagement. The reported data on economic performance is based on audited financial statements by the Company's statutory auditors. No external stakeholders were interviewed as part of this assurance engagement.

### **Opinion**

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not meet the GRI G4 Principles for Defining Report Content, General Standard Disclosures and Specific Standard Disclosures for the 'in accordance' –Comprehensive option of reporting as below:

- a. General Standard Disclosures: The reported General Standard Disclosures in this Report along with references to TML Annual Report (related to governance and ethics), links to Companies websites and other reports, generally meets the disclosure requirements for on 'in accordance' – Comprehensive option.
- b. **Specific Standard Disclosures:** The Report describes the generic Disclosures on Management Approach (DMA) and Performance Indicators for identified material Aspects as below:

#### Economic

- Economic Performance G4-EC1, G4-EC2, G4- EC 3 & G4- EC4;
- Procurement Practices- G4-EC9;

#### **Environmental**

- Materials G4-EN1 & G4-EN2;
- Energy G4-EN3, G4-EN4, G4-EN5, G4-EN6 & G4-EN7;
- Water G4- EN8, G4-EN9 & G4-EN10;
- Biodiversity G4- EN11, G4-EN 12, G4-EN13 & G4-EN 14;
- Emissions G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19, G4-EN20 & G4-EN 21;

#### DNV·GL

- Effluents and Waste G4-EN22 & G4-EN23;
- Compliance G4-EN29;
- Overall- G4-EN31;
- Environmental Grievance Mechanisms G4-EN34;

#### Social

#### **Labour Practices and Decent Work**

- Employment G4-LA1, G4-LA2 & G4-LA3;
- Occupational Health and Safety G4-LA5, G4-LA6, G4-LA7 & G4-LA8;
- Training and Education G4-LA9, G4-LA10 & G4-LA11;
- Diversity and Equal Opportunity G4-LA12;
- Labour Practices Grievance Mechanisms G4-LA16;

#### **Human Rights**

- Investment G4-HR1 & G4-HR2;
- Non-discrimination G4-HR3;
- Freedom of Association and Collective Bargaining G4-HR4;
- Child Labor- G4-HR5;
- Forced and Compulsory Labor G4- HR6;
- Security Practices G4-HR7;
- Human Rights Grievance Mechanisms G4-HR12;

#### Society

- Local Communities -G4-S01 & G4-S02;
- Anti-corruption G4-S03, G4-S04 & G4-S05;
- · Anti-Competitive Behaviour- G4-S07;
- Compliance G4-S08;

#### **Product Responsibility**

- Customer Health and Safety- G4-PR1 & G4-PR2;
- Product and Service Labelling G4-PR3, G4- PR4 & G4-PR5;
- Marketing Communications- G4-PR6 & G4-PR7;
- Customer Privacy G4-PR8;
- Compliance G4-PR9.

#### **Observations**

Without affecting our assurance opinion, we also provide the following observations. We have evaluated the Report's adherence to the following principles on a scale of 'Good', 'Acceptable' and 'Needs Improvement':

#### AA1000AS (2008) Principles

#### **Inclusivity**

The participation of stakeholders in developing and achieving an accountable and strategic response to Sustainability.

The stakeholder engagement process is fairly established to identify sustainability challenges and concerns of stakeholder groups considering the TML Operations businesses and the Report brings out key concerns of selected stakeholders i.e. Employees, Customers, Investors and Shareholders, Government Authorities, Opinion leaders, Suppliers/Service Providers, Dealers and service stations, and Media. The stakeholder concerns are fairly identified, documented and reported. In our opinion, the level at which the Report adheres to this principle is 'Acceptable'.

#### Materiality

The process of determining the issues that are most relevant to an organization and its stakeholders

The materiality determination process was revalidated based on inputs from key stakeholders and senior management of TML and the process has not missed out key material issues related to the Automobile Sector. The management of TML has established internal assessment process for monitoring and management of sustainability performance on a continual basis for their long term organisational sustainability. In our opinion, the level at which the Report adheres to this principle is '**Good**'.

**DNV-GL** 

#### Responsiveness

The extent to which an organization responds to stakeholder issues.

The Report has brought out responses to the identified materiality aspects for the benefit of stakeholders and adequately disclosed the appropriate strategies and management approach related to identified material aspects within the identified aspect boundary; further report brings out the key opportunities and challenges considering the overall sustainability context of the Automobile sector. In our opinion, the level at which the Report adheres to this principle is 'Acceptable'.

#### Reliability

The accuracy and comparability of information presented in the report, as well as the quality of underlying data management systems.

The majority of data and information verified at the Corporate Office, and four out of the seven operational sites were found to be accurate and nothing came to our attention to suggest that reported data have not been properly collated from information reported from the operational sites. Further the calculations and related assumptions used were appropriate considering the protocols used, however 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 subsequently corrected. In our opinion, the level at which the Report adheres to this principle is 'Good'.

#### Specific Evaluation of the information on Sustainability Performances

We consider the methodology and process for gathering information developed by the Company for its sustainability performance reporting to be appropriate and the qualitative and quantitative data include in the Report was found to be identifiable and traceable; the personnel responsible were able to demonstrate the origin and interpretation of the data and its reliability. We observed that the report presents a faithful description of the Company's sustainability activities.

#### Additional Parameters as per DNVGL's VeriSustain Protocol

#### Completeness

How much of all the information that has been identified as material to the organisation and its stakeholders is reported.

The Report has fairly attempted to disclose the General and Specific Standard Disclosures including the disclosure on management approach and performance indicators for identified material aspects for GRI G4 – 'in accordance' – Comprehensive option. The reporting of performance and data is generally acceptable except for certain material aspects as systems to report these performance indicators are being established and TML has set the internal time lines for disclosure. Hence in our opinion, the level at which the Report adheres to this principle is 'Acceptable'.

#### Neutrality

The extent to which a report provides a balanced account of an organization's performance, delivered in a neutral tone.

The disclosures related to sustainability issues and performances are reported in a neutral tone, in terms of content and presentation. In our opinion, the level at which the Report adheres to this principle is 'Good'.

### **Opportunities for Improvement**

The following is an excerpt from the observations and opportunities for improvement reported to the management of the Company and are not considered for drawing our conclusions on the Report; however, they are generally consistent with the management's objectives:

#### **DNV-GL**

- Future reports may further bring out the impacts of material aspects in the value chain, Joint Ventures and Subsidiaries i.e. re-evaluate materiality in the value chain for the reporting boundary related to material, social and environmental impacts of its suppliers, products and services.
- Integrate risk management process with its business sustainability strategy through consistent tracking and reporting of key performance indicators to achieve sustainable performance across geolocations.
- Sustainability performance may be benchmarked across geo-locations for review and monitoring based on long term Sustainability targets. TML could also look at the peers in the industry on sustainability practices in improving the maturity of the practices and its associated business impacts.

# For and on behalf of DNV GL Business Assurance India Private Limited New Delhi, India, $21^{\rm st}$ Oct $^{\prime}$ 2016

Ramesh Rajamani

Lead Verifier,
DNV GL – Business Assurance India Private Limited

Vadakepatth Nandkumar Assurance Reviewer,

Regional Sustainability Manager – Region India & Middle East,

DNV GL – Business Assurance India Private Limited

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# Glossary

AA	Affirmative Action	IMPRINT	Impacting Research Innovation and Technology
ADAS	Advanced Driver Assist System	INR	Indian rupee
ARAI	Automotive Research Association of India	IPCC	Intergovernmental Panel on Climate Change
CAE	Computer Aided Engineering	ISO	International Organization for Standardization
CCI	Competitive Commission of India		-
CFC	Chlorofluorocarbon	ITI N	Industrial Training Institute
CFT	Cubic Feet	JV	Joint Venture
CII	Confederation of Indian Industry	KL	Kilo Litre
CNG	Compressed Natural Gas	KPI	Key Performance Indicator
CRM	Customer Relationship Management	KWp	Kilowatts Peak
CSC	Corporate Steering Committee	LAC	Learning Advisory Council
CSR	Corporate Social Responsibility	LCA	Life Cycle Assessment
CVBU	Commercial Vehicles Business Unit	LCV	Light Commercial Vehicle
DDT	Defensive Driving Training	LDO	Light Diesel Oil
DMS	Dealer Management System	LED	Light Emitting Diode
ELV	End of Life Vehicle	LMV	Light Motor Vehicle
EMS	Energy Management Systems	LPG	Liquefied Petroleum Gas
ENCON	Energy Conservation	LTIFR	Lost Time Injury Frequency Rate
ER	Employee Relations	MCV	Medium Commercial Vehicle
ERC	Engineering Research Centre	MEG	Mono Ethylene Glycol
ETP	Effluent Treatment Plant	M&HCV	Medium and Heavy Commercial Vehicle
FO	Furnace Oil	MMRDA	Mumbai Metropolitan Region Development
FY	Financial Year	NA - 1 1	Authority
GDP	Gross Domestic Product	MoU	Memorandum of Understanding
Gol	Government of India	MT	MetricTonne
GHG	Green House Gases	MTC	Malnutrition Treatment Centre
GJ	Giga Joules	MW	Mega Watt
GRI	Global Reporting Initiative	MWp	Megawatts Peak
HCV	Heavy Commercial Vehicle	NG	Natural Gas
		NGO	Non Governmental Organization
HIPO	High Potential Incident	NPI	New Product Introduction
HR	Human Resources	NSI	Net Satisfaction Index
HSD	High Speed Diesel	NVG SEE	National Voluntary Guidelines on Social,
IITB	Indian Institute of Technology Bombay		Environmental and Economic

NOX	Oxides of Nitrogen	SRM	Supplier Relationship Management
ODS	Ozone Depleting Substance	SROI	Social Return on Investment
OEM	Original Equipment Manufacturer	TAL	TAL Manufacturing Solutions Ltd
ОН	Occupational Health	TAT	Turn Around Time
OHSAS	Occupational Health and Safety Assessment	TBEM	Tata Business Excellence Model
	Series	TCoC	Tata Code of Conduct
PCBU	Passenger Car Business Unit	TDP	Technology Development Programme
PCRA	Petroleum Conservation Research Association	TML	Tata Motors Limited
PM	Particulate matter	TMLDC	Tata Motors Limited Distribution Company
QFD	Quality Function Deployment	TMLDL	Tata Motors Limited Drivelines Limited
R&D	Research and Development	TMML	Tata Marcopolo Motors Ltd
REC	Renewable Energy Certificate	TPM	Total Particulate Matter
RRR	Recovery, Recycling and Reuse	TTL	Tata Technologies Limited
SEC	Securities Exchange Commission	UAY	Uchhatar Avishkar Yojna
SCOE	Standing Committee on Emissions	UK	United Kingdom
SIAM	Society of Indian Automobile Manufactures	UN	United Nations
SIT	Supplier Improvement Team	UNECE	United Nations of Economic Commission for
SHE	Safety, Health and Environment		Europe
SMDF	Sumant Mulgaonkar Development	VCA	Vehicle Certification Agency
500	Foundation	VOC	Volatile Organic Compound
SO2	Sulphur Dioxide		



### General Standard Disclosures

General Standard		
	Description	Page No.
Strategy &	·	0.0
G4-1	Statement from the most senior decision-maker of the organization.	8-9
G4-2	Description of key impacts, risks, and opportunities.	17-18
	onal Profile	_
G4-3	Name of the organization.	5
G4-4	Primary brands, products, and/or services.	5
G4-5	Location of organization's headquarters.	End Cover
G4-6	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	5
G4-7	Nature of ownership and legal form.	Annual Report page 98
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers. /beneficiaries)	5
G4-9	Scale of the reporting organization.	6,28,57
G4-10	The total number of employees by employment contract and gender	57
G4-11	The percentageoftotalemployeescoveredbycollectivebargainingagreements	60
G4-12	The organization's supply chain	73
G4-13	Significantchangesduringthereportingperiodregardingsize, structure, orownership.	5
G4-14	Whether and how the precautionary approach or principle is addressed by the organization	16
G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	19-20
G4-16	Memberships of associations (such as industry associations) and national or international advocacy organizations	16-17
Identified	Material Aspects & Boundaries	
G4-17	All entities included in the organization's consolidated financial statements or equivalent documents	Annual Report Page 95
G4-18	The process for defining the report content and the Aspect Boundaries	5
G4-19	All the material Aspects identified in the process for defining report content	25-26
G4-20	For each  material  as pect, whether  the  As pect  is  material  within  the  organization	26
G4-21	For each  material  as pect, whether  the  As pect  is  material  outside  the  organization	26
G4-22	The effect of any restatements of information provided in previous reports, and the reasons for such restatements	No restatements
G4-23	Significant  changes  from  previous  reporting  periods  in  the  Scope  and  Aspect  Boundaries	5,26
Stakehold	er Engagement	
G4-24	List of stakeholder groups engaged by the organization	22-23
G4-25	Basis for identification  and  selection  of  stakeholders  with  whom  to  engage	22

### General Standard Disclosures

General Standard Disclosures	Description	Page No.	
G4-26	Organization's approach to stakeholder engagement, including frequency of	23	
G4-20	engagement by type and by stakeholder group,	23	
G4-27	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	23	
Report Prof	Report Profile		
G4-28	Reporting period (such as fiscal or calendar year) for information provided	5	
G4-29	Date of most recent previous report (if any)	5	
G4-30	Reporting cycle (such as annual, biennial)	5	
G4-31	The contact point for questions regarding the report or its contents	End Cover	
G4-32	The 'in accordance' option the organization has chosen, the GRI Content Index for the chosen option, the reference to the External Assurance Report, if the report has been externally assured	5	
G4-33	Organization's policy and current practice with regard to seeking external assurance for the report	5	
Governance			
G4-34	The governance structure of the organization, including committees of the highest governance body	10-12	
G4-35	Process for delegating authority for economic, environmental and social topics from body to senior executives and other employees	10-12,65	
G4-36	Whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	10-12	
G4-37	Processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics.	10-12,65	
G4-38	Composition of the highest governance body and its committees	10-12	
G4-39	Whether the Chair of the highest governance body is also an executive officer	Annual Report Page 106	
G4-40	The nomination and selection processes for the highest governance body and its committees	Annual Report Page 170	
G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided an d managed	Annual Report Page 110	
G4-42	The highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts	Annual Report Page 174	
G4-43	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics	Annual Report Page 174	
G4-44	Processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics	Annual Report Page 174	
G4-45	Highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities	Annual Report Page 174	

### General Standard Disclosures

General Standard Disclosures	Description	Page No.
G4-46	Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics	Annual Report Page 174
G4-47	Frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities	Annual Report Page 174
G4-48	The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	Annual Report Page 174
G4-49	The process for communicating critical concerns to the highest governance body	Annual Report Page 174
G4-50	The nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them	Annual Report Page 174
G4-51	The remuneration policies for the highest governance body and senior executives	Annual Report Page 171
G4-52	The process for determining remuneration	Annual Report Page 171
G4-53	How stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals	Annual Report Page 171
G4-54	The ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees	Annual Report Page 106
G4-55	The ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees	Annual Report Page 106
Ethics & Inte	egrity	
G4-56	The organization's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	14
G4-57	The internal and external mechanisms for seeking advice on ethical and lawful behaviour, and matters related to organizational integrity	13
G4-58	The internal and external mechanisms for reporting concerns about unethical or unlawful behaviour, and matters related to organizational integrity	13



Specific Standard	Description	Page No.
Economic	Description	Page No.
Economic Po	prformance	
		27
DMA	Disclosure on Management Approach	27
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	28
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	18-19
EC3	Coverage of the organization's defined benefit plan obligations.	28
EC4	Significant financial assistance received from government.	28
Procuremen	nt Practices	
DMA	Disclosure on Management Approach	77
EC9	Proportion of spending on local suppliers at significant locations of operation	78
Environmer	nt	
Materials		
DMA	Disclosure on Management Approach	47-48
EN1	Materials used by weight or volume.	47-48
EN2	Percentage of materials used that are recycled input materials.	49
Energy		
DMA	Disclosure on Management Approach	39-40
EN3	Energy consumption within the organisation	40-41
EN4	Energy consumption outside of the organisation	43
EN5	Energy intensity	40
EN6	Reduction of energy consumption	41-42
EN7	Reductions in energy requirements of products and services	34
Water		
DMA	Disclosure on Management Approach	52
EN8	Total water withdrawal by source.	52
EN9	Water sources significantly affected by withdrawal of water.	52-53
EN10	Percentage and total volume of water recycled and reused.	52-53
Biodiversity		
DMA	Disclosure on Management Approach	56
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	56
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	56
EN13	Habitats protected or restored.	56
EN14	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	56

Specific		
Standard Disclosures	Description	Page No.
Emissions		
DMA	Disclosure on Management Approach	44-45
EN15	Direct greenhouse gas emissions (Scope 1)	41-42,44
EN16	Energy indirect greenhouse gas emissions (Scope 2)	41-42,44
EN17	Other indirect greenhouse gas emissions (Scope 3)	44
EN18	GHG emissions intensity	44
EN19	Reduction of GHG emissions	45
EN20	Emissions of ozone-depleting substances by weight.	45
EN21	NOx, SOx, and other significant air emissions  by  type  and  weight.	45
Effluents and	l Waste	
DMA	Disclosure on Management Approach	52-54
EN22	Total water discharge by quality and destination.	53
EN23	Total weight of waste by type and disposal method.	54-56
Products and	d services	
DMA	Disclosure on Management Approach	31-39
EN27	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	31-39
EN28	Percentage  of  products  sold  and  their  packaging  materials  that  are  reclaimed  by  category.	No Packaging Reclaimed
Compliance		
DMA	Disclosure on Management Approach	47
EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	47
Overall		
DMA	Disclosure on Management Approach	47
EN31	Totalenvironmentalprotectionexpendituresandinvestmentsbytype.	47
Labour Pract	cices and Decent Work	
Employmen		
DMA	Disclosure on Management Approach	57
LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	57,60-61
LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	57
LA3	Return to work and retention rates after parental leave, by gender.	60
Occupationa	al Health and Safety	
DMA	Disclosure on Management Approach	65-66
LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and	65

Specific Standard	Description	Page No.		
Disclosures		Page No.		
LA6	safety programs.	68-69		
LAO	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and gender.	06-09		
LA7	Workers with high incidence or high risk of diseases related to their occupation	70		
LA8	Health and safety topics covered in formal agreements with trade unions.	65-68		
Training and	Education			
DMA	Disclosure on Management Approach	63-64		
LA9	$Average\ hours\ of\ training\ per\ year\ per\ employee\ by\ gender\ and\ by\ employee\ category.$	63-64		
LA10	Programs for skills  management  and  lifelong  learning  that  support  the  continued  and  lifelong  learning  that  support  the  continued  lifelong  learning  that  support  lifelong  learning  lifelong  lifelon	63-64		
	employability  of  employees  and  assist  them  in  managing  career  endings.			
LA11	Percentage of employees receiving regular performance and career development reviews by gender and employment category	63-64		
Equal Remu	neration for Women and Men			
DMA	Disclosure on Management Approach	55		
LA13	Ratio of basic salary of men to women by employee category, by significant locations of operation	57		
<b>Human Righ</b>	ts			
Investment				
DMA	Disclosure on Management Approach	14-15		
HR1	Percentage and total number of significant investment agreements and contracts that include human rights clauses or that have undergone human rights screening.	14-15		
HR2	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	14-15		
Non-discrim	ination			
DMA	Disclosure on Management Approach	15		
HR3	Total number of incidents of discrimination and corrective actions taken.	15		
Freedom of A	Association and Collective Bargaining			
DMA	Disclosure on Management Approach	15		
HR4	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.			
Child Labou	r			
DMA	Disclosure on Management Approach	15		
HR5	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.	15		
Forced and C	Forced and Compulsory labour			
DMA	Disclosure on Management Approach	16		
HR6	Operations and significant suppliers identified as having significant risk for incidents of forcedor compulsory labour, and measures to contribute to the elimination of all forms of forced or compulsory labour.	15		

Specific Standard				
	Description	Page No.		
Security Pra		62		
DMA	Disclosure on Management Approach	63		
HR7	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	63		
Society				
Local Comm	unities			
DMA	Disclosure on Management Approach	79-84		
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	79-84		
SO2	$Operations\ with\ significant\ potential\ or\ actual\ negative\ impacts\ on\ local\ communities.$	79-84		
Anti-Corrup	tion			
DMA	Disclosure on Management Approach	79-84		
SO3	Percentage and total number of business units analysed for risks related to corruption and the significant risks identified	15		
SO4	Communication and training on anti¬corruption policies and procedures	15		
SO5	Confirmed incidents of corruption and actions taken	15		
Product Res	ponsibility			
Customer He	ealth and Safety			
DMA	Disclosure on Management Approach	33		
PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	30,33		
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	31		
Product and	Service Labelling Service Labelling			
DMA	Disclosure on Management Approach	32-33		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	32-33		
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.	31		
PR5	Results of surveys measuring customer satisfaction.	29		
Marketing C	ommunications			
DMA	Disclosure on Management Approach	15		
PR6	Sale of banned or disputed products	15		
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	15		
Compliance				
DMA	Disclosure on Management Approach	31		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	31		

# NVG Mapping

Principle	Description	Page No.
Principle 1	Businesses should conduct and govern themselves with Ethics, Transparency and Accountability.	13-16
Principle 2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle.	31-39
Principle 3	Businesses should promote the wellbeing of all employees.	57-64
Principle 4	Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.	19-23
Principle 5	Businesses should respect and promote human rights.	14-15
Principle 6	Business should respect, protect, and make efforts to restore the environment.	40-41,47
Principle 7	Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.	16-17
Principle 8	Businesses should support inclusive growth and equitable development	79-84
Principle 9	Businesses should engage with and provide value to their customers and consumers in a responsible manner.	29-30



# **UNGC COP Mapping**

Area	Advanced Criteria	Page Reference
Strategy, Governance and Engagement	Criterion 1:  The COP describes key aspects of the company's high-level sustainability strategy in line with Global Compact principles	Details on our high-level sustainability strategy can found in Managing Director's Statement (Page 8) and Material Issues (Page 25) sections of the report.
	<b>Criterion 2:</b> The COP describes effective decision-making processes and systems of governance for corporate sustainability	Details on effective decision-making processes and systems of governance for corporate sustainability can be found in Corporate Governance (Page 10) of the report
	Criterion 3: The COP describes engagement with all important stakeholders	Details on engagement with all important stakeholders can be found in Stakeholder Engagement section (Page 22) of the report.
UN Goals and Issues	<b>Criterion 4:</b> The COP describes actions taken in support of broader UN goals and issues	We have implemented Policy on Human Rights, Policy on Equal Opportunity and Non-Discrimination in Employment, Environmental Policy, Green Building Policy, Policy on Bribery and Corruption in support of broader UN goals and issues. Actions taken in support of broader UN goals and issues can be found in
UN Goals		Corporate Governance (Page 10), Economic Performance (Page 27) Product Innovation (Page 31), Energy and Climate Change (Page 40), Environmental Stewardship (Page 47), Human Resource Management (Page 57) and Community Development (Page 79) sections of the report.
Human Rights Implementation	Criterion 5:  The COP describes robust commitments, strategies or policies in the area of human rights	We have implemented Policy on Human Rights, Policy on Equal Opportunity and Non-Discrimination in Employment, Environmental Policy, Green Building Policy, Policy on Bribery and Corruption in support of broader UN goals and issues. Details on Human Rights Implementation can be found in Corporate Governance (Page 10) and Human Resource Management (Page 57) sections of the report.
	Criterion 6:  The COP describes effective management systems to integrate the human rights principles	
	Criterion 7:  The COP describes effective monitoring and evaluation mechanisms of human rights integration	
	Criterion 8:  The COP describes key outcomes of human rights integration	
Labour Principles Implementation	<b>Criterion 9:</b> The COP describes robust commitments, strategies or policies in the area of labour	Details on Labour Principles Implementation can be found in Corporate Governance (Page 10) and Human Resource Management (Page 57) sections of the report.
	Criterion 10: The COP describes effective management systems to integrate the labour principles	
	<b>Criterion 11:</b> The COP describes effective monitoring and evaluation mechanisms of labour principles integration	
	Criterion 12: The COP describes key outcomes of integration of the labour principles	

# **UNGC COP Mapping**

Area	Advanced Criteria	Page Reference
Environmental Stewardship Implementation	Criterion 13:  The COP describes robust commitments, strategies or policies in the area of environmental stewardship	Details on Environmental Stewardship Implementation can be found in Corporate Governance (Page 10), Product Innovation and Safety (Page 31), Energy and Climate Change (Page 40) and Environmental Stewardship (Page 47) sections of the report.
	Criterion 14:  The COP describes effective management systems to integrate the environmental principles	
	Criterion 15: The COP describes effective monitoring and evaluation mechanisms for environmental stewardship	
	Criterion 16: The COP describes key outcomes of integration of the environmental principles	
Anti-corruption implement	Criterion 17:  The COP describes robust commitments, strategies or policies in the area of anti-corruption	
	Criterion 18:  The COP describes effective management systems to integrate the anti-corruption principle	We have implemented Policy on Bribery and anti-Corruption in support of broader UN goals and issues. Details on implementation can be found in Corporate Governance (Page 10) section of the report.
	Criterion 19:  The COP describes effective monitoring and evaluation mechanisms for the integration of anticorruption	
	Criterion 20: The COP describes key outcomes of integration of the anti-corruption principle	
Value chain implementation	<b>Criterion 21:</b> The COP describes implementation of the Global Compact principles in the value Chain	Details on Value Chain Implementation can be found in Corporate Governance (Page 10), Stakeholder Engagement (Page 22) and Value Chain Sustainability (Page 73) sections of the report.
Transparency and Verification	Criterion 22: The COP provides information on the company's profile and context of operation	Details on company's profile and context of operation can be found in Company Profile (Page 5) and Corporate Governance (Page 10) sections of the report
	Criterion 22: The COP incorporates high standards of transparency and disclosure	This report uses GRI G4'Core' Reporting Guidelines.
	Criterion 23: The COP is independently verified by a credible third party	This report is independently assured by M/s DNV GL

# Awards and Recognition

#### **Plants**

- Tata Motors' Jamshedpur and Lucknow plant received the Srishti Good Green Governance Award
- TML Pantnagar plant won the Golden Peacock Award 2015
- The Jamshedpur, Lucknow, Dharwad and Pune plants all won Excellent Energy Efficient Unit Awards
- TML Dharwad Plant has been awarded first prize at National Energy Conservation Award 2015 in the Automobile Sector, by the Bureau of Energy Efficiency (BEE)<sup>9</sup>



Mr. K Mohan Kumar – Plant Head, Tata Motors, Dharwad received the National Energy Conservation Award 2015 from the Hon'ble Minister of state for Power, Coal and New & Renewable Energy, Shri Piyush Goyal, at Vigyan Bhavan, New Delhi on December 14, 2015



Jamshedpur Plant won 1st prize in Industry's category of Jharkhand by Jharkhand State pollution Control Board (JSPCB) for best Environmental Initiatives

### Corporate

- Tata Motors won the *Tata Affirmative Action Programme Jury Award*, for exemplary work in positive discrimination and affirmative action towards underprivileged communities in India
- CII-GBC has recognized Tata Motors as industry best in the category of LCA and presented the Best Practices Award in LCA during the function held in Jun'15 at Mumbai 10



TML received the *Excellence in Sustainability Innovation Award* for innovatively applying the holistic approach of Life Cycle Assessment (LCA) for driving sustainability<sup>11</sup>



ASSOCHAM adjudged Tata Motors - WINNER of **Responsible Organization Excellence Award** 2015-16 for our sustainability performance.<sup>12</sup>



Tata Motors received *Global CSR Excellence & Leadership Award* in Accounting for Climate Change during the Global

CSR & Leadership Conference held in Mumbai on 18<sup>th</sup>

Feb'16.<sup>11</sup>

<sup>10</sup> http://articles.economictimes.indiatimes.com/2015-09-29/news/66987475\_1\_nano-cng-tata-sustainability-group-tata-motors

<sup>11</sup> http://www.worldcsrcongress.com/Global%20CSR%20Awards%20Winners%202016.pdf

<sup>12</sup> http://www.business-standard.com/article/companies/m-m-tata-motors-among-most-sustainable-firms-116031401273\_1.html

# **TATA MOTORS**

At Tata Motors, we value our stakeholders, and your views are important to us. Please send in your valuable feedback to:

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