This is Tata Motors Limited’s sixth Sustainability Report covering data from 01 April 2009 to 31 March 2010. The report includes performance data and information related to Indian operations at Jamshedpur, Lucknow, Pune and Pantnagar. The unit at Sanand was in the construction phase during the reporting period, and hence it has been covered separately. The report does not include performance data and information related to Joint Ventures and subsidiaries.

This report is based on Global Reporting Initiative’s G3 Guidelines and is self-rated at applicability level A. Further, this Report serves as our Communication on Progress on the United Nations Global Compact principles. This year we have engaged KPMG to provide professional services for developing this report.

2009-10 was the year of innovation at Tata Motors and hence we have selected “Wheeling Innovation” as the theme for this report. Innovation is an intrinsic part of our growth strategy and we demonstrate it through our approach in everything we do. From changing customer needs to managing scarce resources, elements of innovation are embedded into our business processes.

Our culture of perpetual search for excellence is attributed to our ethos and our efforts to serve customers over several decades by bringing continuous innovation in our products and processes.

We have created several breakthrough products that have changed market dynamics and helped in providing our customers a new experience and value for money. In the 80s we introduced the 407 platform for Light CVs – a cost effective alternative to the then existing Japanese vehicles. In the 90s, we presented Indica – India’s first indigenously designed passenger car, that offered more car per car to the user. In 2005 we introduced ACE – India’s first mini-truck to meet the needs of last mile distribution, offering the functionality of a 4-wheeler at the price of a 3-wheeler. In 2008, we introduced Nano – the people’s car at a price point that was never heard of, with the functionality of a standard car and compliant to current safety and environmental regulations. The Nano has to its credit a record 37 patents. In 2009, we launched the World Truck, a new generation of trucks that match with the best in the world and perform at a lower life-cycle cost.

We have adopted the Tata Business Excellence Model (TBEM) to ingrain innovation across all business processes. This model is based on the Malcolm Baldridge National Quality Award for business excellence and principles of Balanced Score Card. As an outcome of implementation of this model, we have deployed IT systems across the value chain, institutionalized a Stage Gate process to develop right products and implemented a collaborative product development approach that utilizes the capabilities of suppliers, design houses, subsidiaries and associate companies specializing in different verticals.

Our innovation agenda is driven by our people and we diligently identify right talent and nurture them to become future leaders and achieve business goals. At a global level, we continue to position ourselves as a local company in the country of operation in order to address the needs of all stakeholders.

1The report covering our performance for the year 2004-05 and 2005-06 was limited to internal circulation. 2006-07 onwards, we have reported our performance on the public domain and can be accessed at: http://www.tatamotors.com/sustainability/sustainability.php
Guided by a long term vision and decades of experience, our MD steers our company into the future, creating path breaking products and life altering experiences for our consumers across the globe.

The person in command of the steering wheel has great responsibility: to focus on the road ahead without losing track of the path behind.
Dear Stakeholders,

We have great pleasure in introducing Tata Motors Limited’s sixteenth Corporate Sustainability Report providing reliable and impartial information regarding our role as a responsible citizen. We believe that there are no limits to responsibility towards society and our role is important especially when there is a strong potential in our sector to innovate and make efficient products available to our customers.

This year witnessed several historical developments and achievements at Tata Motors, in terms of strategic acquisitions and partnerships, propagation of robust business plans and adoption of sustainable business practices. Vitality important to this was the contribution of each and every one of our employees and business partners that helped us achieve such an excellent performance. Over the years, our biggest acquisitions have been: Jaguar Land Rover, Daewoo Commercial Vehicles Company and Hispano Carrocera S.A., carried out with the intention of scaling up our business and offering a wider product range to our national and international customers. We also launched the much awaited people’s car, the Nano and the all-new second-generation Indigo Manza sedan and displayed our new Crossover vehicle, two new passenger carriers and an entirely new range of heavy commercial vehicles.

This year Tata Motors posted record consolidated net revenues and profits of `925,190 million ($19,376 million) and 9,710 million (US $538 million) respectively. Our domestic sales in India for cars and commercial vehicles were 653,862 units – a growth of 34.1%, of which passenger vehicle sales were 260,020 units – an increase of 25.3% over the previous year.

During the year we took a relook at our sustainability priorities and identified key focus areas namely - Energy and Climate Change, Material and Waste Management, Health and Safety, Sustainable Innovation, and Social Responsibility. This report elaborates on our approach towards enhancing our performance around each focus area.

With the increasing focus on climate change and the subsequent need to control and reduce carbon emissions, we evaluated the carbon footprint of our operations. Apart from our processes, the major focus area is reduction of vehicular emissions during use. We have therefore, initiated development of environment friendly vehicles. We are on the anvil of launching a hybrid electric-CNG city bus and a range of other electric vehicles. Our focus at present is also on harnessing hydrogen as a source of energy. We have reduced our material intensity by recycling scrap metal generated from our operations through co-operative society services. This year we have recycled more than 17,500 MT of metal scrap generated thereby reducing equivalent use of virgin material. We are actively seeking opportunities to diversify our energy mix, and currently renewable energy amounts to around 4.38% of our total energy consumption.

We address health and safety related issues at two levels – operations and products. We follow a zero accident policy and our endeavour is to ensure safe operating conditions for all. I deeply regret the sad demise of three contract personnel that occurred at Jamshedpur, Pune and Lucknow this year. We have taken necessary counter measures to ensure that such accidents do not repeat. Each and every life is precious to us. The occurrence of even an injury is unacceptable in our operations.

Our products are constantly evaluated by the customers on their safety standards. Today’s customers’ justifiably demand advanced safety features in vehicles, as a bare essential and to meet this demand, we have continuously upgraded product safety with new and cost-effective technologies. Tata Motors was the first Indian manufacturer to develop and introduce airbags in vehicles. We are still the only manufacturer in India to have a crush test facility. Our Engineering Research Centre is adequately equipped with state-of-the-art facilities to address specific issues related to the health and safety impacts of our products.

We have created a culture which fosters and drives innovation using a systematic approach comprising of a process framework well-supported by initiatives like Innovating, Innovovation, Innovatix and Innovista. Teams and individuals are encouraged to explore new technologies, alternative methods and processes, and to submit ideas. Such ideas help us to achieve cost savings, enhance efficiencies and better performance. We even capture ideas suggested by our customers, key channel partners and vendors.

During the year, we launched several social responsibility initiatives based on the outcome of a structured stakeholder engagement model. We have linked our focus areas of health, education, employability and environment to the Human Rights Charter, Bharat Nirman Programme and Millennium Development Goals. Some of the notable initiatives include a malnutrition testing centre in collaboration with UNICEF, provision of marketing linkages to self-help groups organised by village women and revamp of course structure at Industrial Technical Institutes. We partnered with Government of Gujarat in their existing projects ranging from health, education, environment to employability enhancement. We touched over 500 thousand people through our social responsibility programmes.

Sustainability is everyday business at Tata Motors and we are cognizant of the fact that we cannot succeed if we do not incorporate this concept in our decision making. I would only reinforce our Group’s commitment to running our business in a sustainable way and creating value for our customers over the long term. I sincerely invite your views and suggestions to further our sustainability agenda.

P M Telang
Managing Director – India Operations
Tata Motors Limited
Vehicles that offer world-class technology, promise superior performance and deliver great mileage at economical costs are desired by all.

Our plants at Jamshedpur, Pune, Lucknow, Pantnagar, and recently Sanand, are built to internationally accepted standards and create exceptional vehicles, which provide much more value for money than ever.
We manufactured a wide range of automotive products as follows:

- **Passenger Cars**: Our passenger cars include the small car – the Tata Nano, the compact cars – Indica and the Indica Vista, the mid-sized cars - Indigo and the newly launched Indigo Manza and the station wagon version of the Indigo, the Indigo Marina. We have expanded our car lines by introducing several variants to suit different customer preferences. For example, the Indica gasoline variant, Xeta, is available with a dual fuel (petrol and liquefied petroleum gas) engine. Jagar has established its presence in the premium car segment. With the discontinuation of production of the X-Type in December 2009, Jaguar currently produces three car lines, XK, XF and XJ. A new generation of the Jaguar, XJ, was also unveiled in London in July 2009.

- **Utility Vehicles**: We manufacture a number of utility vehicles, including the Sumo, and the sports utility vehicle, the Tata Safari and the lifestyle pickup, the Xenon XT. The Sumo, the Safari and the Xenon XT have variants to meet different consumer preferences such as the Safari DICOR 2.2 VVT range, powered by a new 2.2 L Direct Injection Common Rail (DlCOR) engine and the Sumo Grande, an SUV with the comforts of a family car. We have unveiled Asia, our next generation of premium SUV powered by a 2.2 L DlCOR engine at the Auto Expo 2010. Land Rover produces five car lines under the brands of Range Rover and Land Rover, and provides us with presence in premium all-terrain vehicles. Range Rover is the premium range consisting of Range Rover and Range Rover Sport, and the Land Rover brand comprises of the Defender, Discovery and Freelander vehicles.

- **Light Commercial Vehicles**: We manufacture a variety of light commercial vehicles, or LCVs, including pickup trucks, trucks and buses with a GVW of between 0.7 tonne and 7.5 tonnes. This also includes the Ace, India’s first indigenously developed mini-truck with a 0.7 tonne payload, the Magic, a passenger variant for commercial transportation developed on the Ace platform, and the Winger.

- **Medium and Heavy Commercial Vehicles**: We manufacture a variety of medium and heavy commercial vehicles, which include trucks, buses, dumpers and multi-axled vehicles with GVW of between 9 tonnes to 49 tonnes. In addition, we manufacture a range of high horsepower trucks ranging from 220 horsepower to 500 horsepower, including dump trucks, tractor-trailers, mixers and cargo vehicles. During fiscal 2010, we unveiled a new range of trucks, referred to as the as ‘Primus’ line, to our customers in India, South Korea, and expect to extend the offer gradually to other countries such as South Africa, the other SAARC countries, Middle East and various countries in Africa.

As an organisation that is actively involved in policy making and driving change, we are members of a number of organisations that strive to add value to the automobile industry:
- Indo German Chamber of Commerce
- Society of Indian Automobile Manufacturers (SIAM)
- Association of Indian Automobile Manufacturers (AIAM)
- Maharashtra State Development Council, Mumbai
- Indo American Chamber of Commerce
- The Indo-Japanese Association
- Automotive Research Association of India (ARAI)
- Confederation of Indian Industry (CII)

*Passenger cars include Fiat vehicles distributed by us.*
A clear view is essential, to maintain a momentum and to race ahead at high speeds.

**Passenger Car Business Unit (PCBU)**

**Vision**
To develop TATA into a world class Indian car brand for innovative and superior value vehicles.

**World class in:-**
- Product appeal and styling - clean, contemporary lines and shapes
- Interior space and passenger comfort
- Quality and reliability

**Superior value in offering:-**
- Lowest ownership cost
- Relevant cost effective technology
- More content at same price point as competition

**Mission**
- To be the most admired multi-national Indian car company producing vehicles that people love to buy
- To create an organization that people enjoy working for, doing business with and investing in

**Commercial Vehicle Business Unit (CVBU)**

**Vision**
To be a world class corporate constantly furthering the interest of all its stakeholders.

**Mission**

**Shareholders:** To consistently create shareholder value by generating returns in excess of Weighted Average Cost of Capital (WACC) during the upturn and at least equal to Weighted Average Cost of Capital (WACC) during the downturn of the business cycle.

**Customers:** To strengthen the Tata brand and create lasting relationships with the customers by working closely with business partners to provide superior value for money over the life cycle.

**Employees:** To create a seamless organization that incubates and promotes innovation, excellence and the Tata core values.

**Vendor and Channel Partners:** To foster a long-term relationship so as to introduce a broad range of innovative products and services, that would benefit our customers and other stakeholders.

**Community:** To proactively participate in reshaping the country’s economic growth. To take a holistic approach towards environmental protection.

We are guided by a clear vision, well supported by management systems that help us achieve unattainable goals and demonstrate sound performance.
Our corporate governance principles function as our robust chassis, protecting us from unethical business practices and ensuring smooth functioning of our organisation.

A strong chassis protects the occupants and ensures a smooth ride, and a vehicle built on such a chassis can cross all barriers outperforming its competition.
As a Tata company, our philosophy on Corporate Governance is founded on a legacy of fair, ethical and transparent governance practices based on the highest standards of professionalism, honesty, integrity and ethical behaviour. Over the years, we have enhanced the mechanisms that govern our operations. We have adopted and implemented the Tata Code of Conduct that articulates our values, ethics and business principles and serves as a guide to our organization, directors and employees.2

We cherish the presence of renowned business leaders who provide informed oversight on our strategic business decisions. Their experience and knowledge have been instrumental in Tata Motors’ success over the years. Our Board of Directors, chaired by Mr. Ratan N. Tata, consists of 12 non-executive Directors (including 6 Independent Directors). The composition of the Board, as on 31 March 2010 is as follows:

S. No. Name of Directors Position of responsibility
1. Mr. Ratan N Tata Non-Executive, Chairman
2. Mr. Ravi Kant Non-Executive, Vice Chairman
3. Mr. N A Soonawalla Non-Executive
4. Mr. J J Irani Non-Executive
5. Mr. R Gopalakrishnan Non-Executive
6. Mr. N N Wadia Non-Executive, Independent
7. Mr. S M Pala Non-Executive, Independent
8. Mr. R A Mashelkar Non-Executive, Independent
9. Mr. S Bhargava Non-Executive, Independent
10. Mr. N Munjve Non-Executive, Independent
11. Mr. V K Jairath Non-Executive, Independent
12. Mr. Carl-Peter Forster Group CEO and Managing Director
13. Mr. P M Telang Managing Director – Indian Operations

To address the various governance requirements we have the following committees: Audit committee, Remuneration committee, Investors’ Grievance committee, Executive committee, Nominations committee, Ethics and Compliance committee. We have health, safety and environment committees at each plant. HSE performance is monitored and reviewed by the top management regularly. We have an ERM system that maps the strategic, operational (including Safety), carbon related, financial and governance risks related to the Business strategy. It also assesses potential weaknesses in the internal processes. It is facilitated by respective Risk Champions who are required to determine the risk treatment (Accept /Reduce/Transfer/Eliminate) and work out the mitigation plans accordingly.

Ethics at Tata Motors

The Tata Code of Conduct (TCoC) plays an important role in infusing principles of ethics, transparency and responsibility in our operations. Over the years, the TCoC has ensured that ethical practices are adopted, monitored and reviewed at Tata Motors. The conformance of employees to TCoC is monitored by the Ethics and Compliance Committee. It ensures that each employee becoming a part of Tata Motors’ growth story abides by the content and motive of the TCoC, and thereby manifests its role in avoiding risks related to ethical non-compliance in our operations. Any cases of non-compliance to the Code are taken seriously across all levels, and persons involved are penalized accordingly. We have also appointed a lady Ethics Counselor across locations as a part of our Sexual Harassment Redressal Mechanism. Opportunities and forums have been created for all employees and stakeholders to voice a genuinely held concern about ethical misconduct or report a violation that is perceived to be in contravention to the Code. Systems and processes for addressing remedial and disciplinary actions arising out of violation of the code have also been put in place. The status on ethical concerns is presented in the Audit Committee meeting on a periodic basis.

Management Systems

The Tata Business Excellence Model enables us to drive performance and attain higher levels of efficiency in our businesses and our social responsibility initiatives. An Enterprise Process Model (EPM) manual comprising of enterprise level processes and their sub-processes helps us to conduct business in an efficient and effective manner. The model is continuously upgraded to ensure that it evolves in line with process changes, changing business needs and global paradigm shifts. This approach has helped us to evolve a uniform approach to all business processes across all manufacturing locations. We have successfully implemented ERP SAP, which has given us the advantage of reliable, consistent and accurate data across all areas of operations. We also keep track of industry/competition through many approaches including innovative processes such as ‘TIBRE3’ (Fact & Information Base Reverse Engineering Of Strategies). Our CRM-SMS (Customer Relationship Management – Dealer Management System) is a unique initiative, implemented through a centralized online system. This is developed and deployed to all the channel partners (2000+ locations).

All our manufacturing locations have adopted and are certified to management systems related to quality, environment, occupational health and safety and social accountability. We have mandated our suppliers to adopt ISO 9001/TS 16949 quality management system framework for implementation, management and improvement of their work processes.
An efficient and able assembly line ensures that a vehicle is built to surpass all hitherto accepted standards.

The contents of this report have been essentially developed after assessing the feedback received from our stakeholders and subject to our materiality assessment framework.
We have pursued a strategy of increasing our presence in the global automotive market and of enhancing our product range and capability through strategic acquisitions and alliances. Our goal is to position ourselves as a major international automotive company by offering products across various markets by combining our engineering and other strengths. We also acknowledge the impacts of our operations on the environment and society and strive to mitigate any negative impacts. The Board has the overall responsibility of executing the strategy and detailing the business plan based on identified internal and external risks. The outcome of stakeholder engagement also forms a key input to our strategy. We make every effort to address the concerns and expectations of our stakeholders by proactively engaging with them through various forums and media.

This year we made an effort to identify and prioritize material sustainability issues through an employee engagement exercise conducted at our manufacturing plants across India, followed by a senior management review. All the issues of material significance were identified and ranked across six critical materiality filters. A materiality threshold was defined and all the issues with ranking beyond the threshold were subject to management review. On the basis of prioritization and management review, five material issues have been identified:

• **Energy and Climate Change**
  The maximum impact of a vehicle on climate change is during its use and we continually strive to produce products that have improved fuel efficiency and lower emissions throughout their life cycle. Across manufacturing plants, we also focus on energy efficient processes and conservation initiatives.

• **Material and Waste Management**
  Material substitution is a focus area at Tata Motors, where we try to replace virgin materials and/or hazardous materials by environment friendly materials. Recycle and reuse of materials, along with reduction of waste, not only contributes towards reducing our environmental impacts, but also help in improving our operational efficiency. Our research and development team is working towards evaluating the end of life recoverability and recyclability of our vehicles.

• **Health and Safety**
  Vehicular safety is of paramount importance for our customers, and we ensure that the safety performance of our vehicles exceed the prescribed standards. By virtue of our manufacturing processes, occupational health and safety is vitally important to us, and we have taken steps to reduce incidents and accidents by providing a safe working environment.

• **Sustainable Innovation**
  The year 2009-10 was the “Year of Innovation” for Tata Motors, and this was demonstrated by our path breaking products such as the Nano and the World truck. From changing customer needs to managing scarce resources, elements of innovation have been embedded into our business processes.

• **Social Responsibility**
  Building on the legacy of the Tata Group, we at Tata Motors contribute to the development of society through varied and numerous initiatives, spread across geographies. Environment, education, health and enhancing employability are our focus areas.

Going forward, we intend to expand the materiality assessment framework to include inputs from our key stakeholders. We also plan to review our materiality assessment on a periodic basis. Our approach and performance on the material issues have been discussed in detail in the respective performance sections.
Employees are our core strength. We engage with our employees through various structured as well as informal forums that include town hall communications, employee satisfaction surveys, employee suggestion schemes, performance appraisals and feedback. Employees are encouraged to discuss or report any issue of concern with appropriate personnel in the organization based on the nature and area of concern. We have an efficient system in place for employees to report any non adherence to Tata Code of Conduct related issues, to the Management. The internal newsletters and magazines provide employees with key information regarding our future plans while sharing best practices and celebrating achievements. Employee suggestion schemes have helped us achieve operational excellence and they have also made employees realize that they are integral part of our success. The issues and concerns of employees are periodically reviewed and addressed by our Management Committee.

### Stakeholder engagement mechanisms

<table>
<thead>
<tr>
<th>Who do we engage with?</th>
<th>Shareholders</th>
<th>Customers</th>
<th>Investors</th>
<th>Government; Regulatory agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do we engage?</td>
<td>Annual General Meetings; Quarterly communication; Analyst meet</td>
<td>Customer meets; Key account process; Surveys; Feedback calls;</td>
<td>Investor meets; Investor calls; Road Shows</td>
<td>One-to-one meetings</td>
</tr>
<tr>
<td>How frequently do we engage?</td>
<td>Annual; Quarterly: Twice a year</td>
<td>As per requirement</td>
<td>As per requirement</td>
<td>Requirement based</td>
</tr>
<tr>
<td>What is the agenda?</td>
<td>Financial performance; Future strategies; Feedback and address of concerns; Approval from shareholders</td>
<td>Understand product feedback; Redress complaints; Suggestions on product development;</td>
<td>Financial performance; Future strategies; Feedback and address of concerns</td>
<td>Relationship building; Approaching the government on industry constraints; Discussions on way forward</td>
</tr>
<tr>
<td>How do we assess it?</td>
<td>Transcripts of teleconferences; Minutes of AGM</td>
<td>Customer Satisfaction Index; JD Power Survey</td>
<td>Minutes of meeting; Action plans;</td>
<td>Minutes of meeting; Action plans;</td>
</tr>
</tbody>
</table>

We have a vast network of suppliers and dealers across the country. We regularly engage with our suppliers and dealers and have established relationship management programmes with them. We periodically conduct supplier and dealer meets to discuss mutual issues of concern. Suppliers and dealers can reach the management at all times on any issue or concern through their respective company contact points. The Board periodically reviews and addresses supplier and dealer related issues. Many of our suppliers share a special relationship with us and we have helped a number of them grow their business. A large number of our suppliers who used to supply exclusively to Tata Motors have now grown significantly, and supply to other businesses as well.

We are guided by the legacy of Tata Group while establishing community relationships and engaging in philanthropic activities. We have dedicated Corporate Social Responsibility (CSR) cells across our plants and also at the corporate level and they are responsible for the implementation of community development initiatives. We conduct periodic community needs assessment surveys to understand the concerns and expectations of the communities in which we operate and accordingly develop our engagement strategies. Our interventions are aimed at receiving active participation from communities, often asking them to take ownership of initiatives. We also partner with NGOs. We undertake impact studies to understand the effectiveness of our initiatives and have regular reviews as per the Tata CSR Protocol.

This year we have made an effort to engage with our employees on our sustainability agenda. The outcome of this engagement was reviewed by the top management and the results have been encouraging.

<table>
<thead>
<tr>
<th>Stakeholder engagement mechanisms</th>
<th>Community; Society</th>
<th>Employees</th>
<th>Dealers</th>
<th>Suppliers / Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do we engage?</td>
<td>Sunrise and Sunset meetings; Horizontal communications; Horizontal deployment; Weekly / Monthly reviews; Improvements displays</td>
<td>Meetings with local community; Public hearing</td>
<td>Dealer meets; Joint programmes; Kaizen events; Participation in QFD and NPI; Competitor data and analysis; Special training programmes</td>
<td>Technology Days; Supplier meets; Joint programmes; Kaizen events; Participation in NPI, Competitor data and analysis</td>
</tr>
<tr>
<td>How frequently do we engage?</td>
<td>Annual; Quarterly; Monthly; Weekly</td>
<td>Daily; Quarterly;</td>
<td>Annual; Quarterly; Daily</td>
<td>Annual; Quarterly;</td>
</tr>
<tr>
<td>What is the agenda?</td>
<td>Community development initiatives; Communication; Capturing societal concerns</td>
<td>Understanding concerns; Communicating policy decisions and seeking feedback; Communicating performance</td>
<td>Building capacity and technical know-how; improving and delivering better response to customers</td>
<td>Delivering quality products; Time management; Compliance to Tata Code of Conduct and other policies;</td>
</tr>
<tr>
<td>How do we assess it?</td>
<td>Minutes of meeting; Action plans; Feedback letters;</td>
<td>Employee satisfaction survey; Appraisals</td>
<td>Dealer Satisfaction Index;</td>
<td>Vendor rating; Board reviews</td>
</tr>
</tbody>
</table>
We surpassed the economic downturn on the basis of our superior products and robust financial management practices. We have grown with rapid strides, taking our employees and business partners along with us.

Banking on people, investing in state-of-the-art Research and Development, building world class manufacturing facilities, creating a strong marketing network and sound financial management practices result in accelerated growth.
The automobile industry was amongst the worst-hit sectors during the global meltdown. Automotive sales in North America, Continental Europe and the United Kingdom were particularly hard-hit in 2008-09, mainly due to the rise in fuel prices and the collapse of banking institutions. Sales of cars in the United States declined by 21.5% over the previous year while sales in Europe and the United Kingdom declined by 11.9% and 6.4% respectively. By contrast, the automotive sector in Asia experienced growth. China and India were the main drivers of this growth. India witnessed growth in passenger vehicle sales of 24.5% from 1.5 million units in 2008-09 to about 1.9 million units in 2009-10 in the domestic market. Commercial vehicle sales in India also registered a recovery of 40% because of increased execution of major infrastructure projects in the country. A robust product mix and involvement of suppliers and partners enabled us to achieve a greater operational efficiency, including a low break-even point.

We posted a record net revenue and profit of ₹ 355.93 billion and ₹ 22.40 billion respectively during the year. Our domestic sales figures in India were 653,862 units – a growth of 34.1% over the previous year. The sales of passenger vehicles increased by 25.3% to 260,020 units in this year. On the basis of consolidated (group) revenues in 2009-10, Tata Motors entered the Fortune Global 500, a closely-watched annual ranking of the world’s largest corporations with a rank of 442. We are also the basis of consolidated (group) revenues in 2009-10, Tata Motors entered the Fortune Global 500, a closely-watched annual ranking of the world’s largest corporations with a rank of 442. We are also India’s 5th most valuable brand, with a brand value of US$ 3.28 billion, as per the 2009 edition of India’s Most Valuable Brands Study.

Sustainable Supply Chain

Our approach to manage risks in the supply chain has been focussed towards maintaining relations based on mutual respect and equal opportunities with all our suppliers and partners. We follow set criteria for managing procurement and contractual purchases of goods and services in line with our general purchase and contracting conditions. We have initiated steps to include our supply chain in our initiatives on social accountability and environment management activities. Our endeavour is to partner with suppliers who bring expertise and innovative solutions to improve the environmental profile of our facilities, enabling employees to work in an environmentally conscious workplace. All our significant investments, including contracts with suppliers incorporate the aspects of human rights as stipulated by all national and state laws.

We have undertaken an e-commerce initiative through the development of a business-to-business site with the assistance of our subsidiary, Tata Technologies Limited, for electronic interchange of data with our suppliers in India. This has enabled us to have real-time information exchange and processing to manage our supply chain effectively. Further, we use external agencies as third party logistics providers to reduce space and save costs.

We are also exploring opportunities for global sourcing of parts and components from lower cost countries, and have embarked on a vendor management programme that includes vendor base rationalization, vendor quality improvement and vendor satisfaction surveys. In India, about 60% of our procurement in terms of value is from locally based vendors (within the same state of operation), many of who supply exclusively to Tata Motors and we ensure that we provide them with a steady source of income through our ever expanding operations.

We are also working with our channel partners to reduce our climate change impact in our supply chain. Through our unique initiative, Green Dealership, we are creating awareness and promoting good environmental practices and management systems in our supply chain. The initiative also aims at disseminating information on energy conservation which could provide potential financial savings for our channel partners. We have estimated the carbon footprint of our tier-1 supply chain and have initiated a CO2 abatement plan at the supplier level. The following are some of our key milestones:

- Creating awareness amongst the vendors on climate change through a 20 minute info-module on the science, impacts, causes and abatement of climate change and related effects
- Sharing energy conservation ideas that are working effectively across our locations
- Collecting environment and energy related data through a questionnaire from Tier-1 vendors and estimating their footprint attributable to operations related to Tata Motors

We have initiated Product Development / Engineering programs for our suppliers that include 3D design visualization capability, enriching digital content by adding behaviour to digital models, knowledge based engineering tools and enhanced digital collaboration. A supplier portal, which facilitates close collaboration from design / development stage to production planning and scheduling was also introduced.

Vendor Parks – Creating shared value

We have established vendor parks in the vicinity of our manufacturing operations and vendor clusters have been formed at our facilities at Pantnagar and Sanand. This initiative is aimed at ensuring flow of component supplies on a real-time basis, thereby reducing logistics and inventory costs as well as lowering uncertainties in the long-distance supply-chain.

At Sanand, adjacent to our plant boundary, we have established a vendor park with all basic amenities in place which would house vendors supplying exclusively to Tata Motors. We aim to source more than 60% of our components from the vendor park, thus increasing our resource efficiency and decreasing our emissions due to reduction in logistics related travel. Our plan is to accommodate around 40 vendors in the park. In a sequential manner we plan to generate awareness amongst our vendors about issues like work-site safety, energy and water conservation and encourage them to take up activities to make their operations sustainable. A registered co-operative society will be formed by the vendors and there would be a management committee that will have representation from TML and the vendor co-operative society. Through this initiative we are aiming to generate employment for close to 4000 personnel.

Economic Value Generated and Distributed (in ₹ billion)

<table>
<thead>
<tr>
<th>Economic Value Generated</th>
<th>383.64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Value Distributed</td>
<td>368.21</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>322.99</td>
</tr>
<tr>
<td>Employee Benefits and Wages</td>
<td>18.36</td>
</tr>
<tr>
<td>Payments to providers of capital</td>
<td>20.96</td>
</tr>
<tr>
<td>Payments to government</td>
<td>5.89</td>
</tr>
<tr>
<td>Economic Value Retained</td>
<td>15.43</td>
</tr>
</tbody>
</table>
Research and Development

We continue to increase our investment in research and development to support future innovation to ensure that we have the new products and technologies to maintain and grow our market positions to be the leaders in the locations we operate. During the year we have spent ₹ 11,711 billion on research and development activities, which was 3.29% of the net turnover. We have technologically upgraded our engine development centre by adding facilities such as a 440KW High Dynamic Transient Dynamometer with a state-of-the-art raw gas emission measurement and intake air-conditioning system for developing heavy duty commercial vehicle engines. We have also added a variety of testing facilities and equipment such as a sound quality studio, acoustic transmission loss test rigs for specific body panels, cost effective telemetry based measurement system for pass by noise, wheel force transducers to gather road load data in a single set up and have also indigenously developed in-house capability to conduct side pole impact crash tests. Innovations such as ultra violet tubes and portable oil skimmers have been successfully used to extend the useful life of coolants. We have developed the following new technologies/methods and processes for our range of passenger cars and commercial vehicles such as:

- Plastic balance gears
- Spoked flywheel
- Mass dampers on rear suspension arms
- Dual mass flywheel system

During the year, we have filed for 150 patent applications, 44 design applications and 78 copyright applications. 6 patents were granted, 30 design and 34 copyrights were registered for applications filed in the earlier years.

<table>
<thead>
<tr>
<th>Technology for</th>
<th>Imported from</th>
<th>Year of import</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development &amp; application of a two cylinder common rail diesel engine for small passenger car and small commercial vehicle</td>
<td>FEV, Germany</td>
<td>2007-08 2008-09 2009-10</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Gas injection technology for LCV, MCV and HCV engines</td>
<td>AEC, Australia</td>
<td>2009-10</td>
<td>In progress</td>
</tr>
<tr>
<td>Stop-Start feature for various vehicle platforms</td>
<td>Lucas, UK Continental, USA</td>
<td>2009-10</td>
<td>In progress</td>
</tr>
<tr>
<td>Concept-Automated Manual transmission for commercial vehicles</td>
<td>Prodrive, UK Porsche, Germany</td>
<td>2009-10</td>
<td>One unit imported as Technology Demonstrator Completed</td>
</tr>
<tr>
<td>Multiplexed wiring systems for bus platforms</td>
<td>Continental, USA</td>
<td>2009-10</td>
<td>Completed</td>
</tr>
<tr>
<td>Gas injection technology for Ace, Xenon and winger engines</td>
<td>AFS, Canada</td>
<td>2009-10</td>
<td>Completed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology for</th>
<th>Imported from</th>
<th>Year of import</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine management for series hybrid technologies for buses</td>
<td>Ricardo UK Ltd, UK</td>
<td>2006-07</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Design and development of new generation engine platforms for LCVs and UVS</td>
<td>AVL List GMBH Austria delphi diesel systems, France</td>
<td>2007-08</td>
<td>Completed</td>
</tr>
<tr>
<td>Design and development of infinitely variable transmission based on full toroidal-traction drive variators for various vehicle platforms</td>
<td>M/s torotrak (holdings) Ltd. UK</td>
<td>2007-08</td>
<td>Under implementation</td>
</tr>
<tr>
<td>Design and development of flush sliding and plug</td>
<td>Wagon SAS, France</td>
<td>2007-08</td>
<td>Completed</td>
</tr>
<tr>
<td>Design and development of electric hatchbacks in windows vehicle - Indica Vista EV</td>
<td>Tata Motors European Technical Center plc, UK Ltd. (TMETC)</td>
<td>2008-09</td>
<td>Under implementation</td>
</tr>
</tbody>
</table>
Globally, the automobile industry is focusing on developing vehicles that can run on clean fuels, have a high fuel efficiency, low emissions, high end-of-life recyclability and low material intensity.

Our Engineering Research Centre spearheads Research and Development at Tata Motors. It is well-supported by the robust environment management practices adopted by us enabling us to create a greener environment.
The looming crises of climate change, water scarcity, decreasing air quality, and resource constraints are long-term challenges for our operations. Natural resources and ecosystems have been undervalued, and the environmental impacts of business have been regarded as externalities. At Tata Motors, we believe we must manage our operations such that we comply with the highest standards of business practices and environmental sustainability. The key elements being; improved energy efficiency and conservation, diversity of energy sources, material stewardship and waste management, water conservation, biodiversity management, application of innovation and new technologies and compliance with national laws and relevant conventions. This year, we have invested a total of ₹ 238.13 million towards environment management activities across operations.

**Progress on commitments**

<table>
<thead>
<tr>
<th>What we said</th>
<th>What we have achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch over to Bharat IV.</td>
<td>Achieved</td>
</tr>
<tr>
<td>Develop hybrid electric cars, electric traction systems for buses, hybrid buses, fuel cell buses, electric cars, electric small commercial vehicles and bus rapid transit systems.</td>
<td>In progress</td>
</tr>
<tr>
<td>Eliminate asbestos based brake pads and clutches.</td>
<td>Achieved</td>
</tr>
<tr>
<td>Eliminate solvent based paints in products.</td>
<td>Achieved</td>
</tr>
<tr>
<td>Eliminate hexavalent chromium for corrosion preventive coatings.</td>
<td>Achieved</td>
</tr>
<tr>
<td>Develop lead free bearing shells and bushes.</td>
<td>Achieved</td>
</tr>
<tr>
<td>Work to find ways to harness hydrogen as a source of energy.</td>
<td>In progress</td>
</tr>
<tr>
<td>Work on development of environmentally friendly vehicles (EFVs).</td>
<td>In progress</td>
</tr>
<tr>
<td>Enhance the drain period of axle and gearbox oil.</td>
<td>In progress</td>
</tr>
</tbody>
</table>

**Material and Waste Management**

The principal materials and components required by us for use in our vehicles are steel sheets and plates, castings, forgings and items such as tires, fuel injection equipment, batteries, electrical items and rubber and plastic parts, consumables (paints, oils, thinners, welding consumables, chemicals, adhesives and sealants) and fuels. We also require aggregates like axles, engines, gear boxes and cabs for our vehicles, which are manufactured by us or by our subsidiaries, affiliates or strategic suppliers.

Innovation is a catalyst to our way of business and an intrinsic part of our growth strategy. We have successfully implemented lead free - wheel balance weights, printing inks, bulbs, coatings for fuel tanks, carbon brushes for electrical motors and alternative design/coatings for hard chromium and cadmium plating. Asbestos-free brake pads and clutches have been introduced in many of our products. Work is under progress for reducing and eliminating hexavalent chromium for corrosion preventive coatings and developing lead free bearing shells and bushes. We are compliant with the European Union directive 2000/53/EC on end-of-life vehicles (ELVs) that banned the use of four hazardous heavy metals in automobiles. Our products Indica and Indigo have already achieved 85% recyclability as per EEC Directive. Recently, Indica Vista has been awarded the prestigious European Recyclability Compliance Certificate, as per the EC Directives, by the Vehicle Certification Agency, UK.

This year we have reused 17,784 tonnes of metal scrap and forging in our process thereby avoiding use of freshly procured material. In addition, waste sand and machine slurry generated at our Jamshedpur unit is used for land filling within the premises. We have optimized our fleet with vehicles less than five years of operation that helped to increase fuel efficiency.

**Recycling bus seats**

Chassis of some buses, built at the Lucknow plant, are sent to the Automobile Corporation of Goa Ltd. (AGCL) for the building of their body. Once their body is built by AGCL, the driver seats in the buses are replaced with new ones. In order to reduce costs and wastes, our team at the Lucknow plant decided to obtain these discarded driver seats from AGCL and use them for building the new driver’s seat, after conducting minor repairs. The new refurbished seats are then fit into the chassis, resulting in huge reduction of waste and requirement of virgin material.

**Reusing metallic pallets**

At Lucknow plant we came up with an innovative programme for complete replacement of wood packaging material at some of our plants. To eliminate environmental impacts of wood consumption, scrap metallic pallets were sent to engine suppliers, as a replacement for wood packaging. Metallic pallets are now being reused for the transportation of our engines. The packaging for sheet metal parts too has been changed from wooden to corrugated boxes which have a recycling potential of minimum 4 times.

Across locations, the non-biodegradable non-hazardous waste is disposed off as scrap, while the bio-degradable non-hazardous waste is used to make manure. At our Jamshedpur plant, we have installed an organic waste converter to process the wet waste generated from the canteen along with the biodegradable waste. The major categories of non-hazardous waste generated at our locations include plastic waste, metallic scrap and other packaging waste. Due to various initiatives to reuse packaging material, we have gradually reduced the disposal of non-hazardous waste over the last 3 years.

### Materials and Waste Management

<table>
<thead>
<tr>
<th>Material</th>
<th>Unit of Measurement</th>
<th>Quantity 2008-09</th>
<th>Quantity 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>Tonnes</td>
<td>153,240</td>
<td>185,205</td>
</tr>
<tr>
<td>Steel Tubes</td>
<td>Tonnes</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>Non-Ferrous alloys</td>
<td>Tonnes</td>
<td>2,635</td>
<td>3,339</td>
</tr>
<tr>
<td>Ferrous Alloys</td>
<td>Tonnes</td>
<td>1,251</td>
<td>1,372</td>
</tr>
<tr>
<td>Steel Melting Scrap</td>
<td>Tonnes</td>
<td>43,281</td>
<td>53,418</td>
</tr>
<tr>
<td>Paints, Oils &amp; Lubricants</td>
<td>Tonnes</td>
<td>7,896</td>
<td>7,684</td>
</tr>
<tr>
<td>Tyres, tubes &amp; flaps</td>
<td>Numbers</td>
<td>4,086,280</td>
<td>4,555,111</td>
</tr>
<tr>
<td>Engines</td>
<td>Numbers</td>
<td>69,002</td>
<td>104,309</td>
</tr>
</tbody>
</table>

7 Includes cartons, jute bags, sand waste, asbestos waste, temperature sensitive material.

The key materials used for the production of our vehicles have been listed below:

<table>
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<td>104,309</td>
</tr>
</tbody>
</table>

at our Jamshedpur plant. New boxes are not consumed and these boxes are recycled when various dispatches are made from the factory. The wood from broken boxes is reused to make tool boxes and other utility items.
CRUISING TOWARDS A GREENER ENVIRONMENT

The hazardous wastes generated are disposed as per the rules and regulations prescribed by the respective State Pollution Control Board (SPCB) as per the Hazardous Wastes Management & Handling Rules. The following is a depiction of the hazardous waste we have disposed over the last 3 years.

<table>
<thead>
<tr>
<th>Category of Hazardous waste</th>
<th>FY 2007-08</th>
<th>FY 2008-09</th>
<th>FY 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sludge (tonnes)⁸</td>
<td>5,929.85</td>
<td>4,536.28</td>
<td>4,299.25</td>
</tr>
<tr>
<td>Used Batteries (tonnes)⁹</td>
<td>18.35</td>
<td>32.14</td>
<td>37.76</td>
</tr>
<tr>
<td>Used oil (tonnes)¹⁰</td>
<td>203.14</td>
<td>150.93</td>
<td>168.00</td>
</tr>
<tr>
<td>Oil contaminated materials (tonnes)¹¹</td>
<td>33.23</td>
<td>44.83</td>
<td>23.56</td>
</tr>
<tr>
<td>Other hazardous waste (tonnes)¹²</td>
<td>290.04</td>
<td>289.97</td>
<td>402.15</td>
</tr>
<tr>
<td>Other hazardous waste (KL)¹³</td>
<td>0.00</td>
<td>131.24</td>
<td>121.66</td>
</tr>
<tr>
<td>Other hazardous waste (Nos)¹⁴</td>
<td>11,691.00</td>
<td>7,284.00</td>
<td>4,314.00</td>
</tr>
</tbody>
</table>

We are committed to the prevention of spills from our operations. Across locations, there is a continuous upgrading of systems with timely replacement of equipment and comprehensive inspection. There were no significant spills across our operations during the year.

Reusing ETP Sludge

In the automobile industry, ETP sludge generated is a hazardous waste that poses a serious problem. In a first of its kind initiative, we have developed a technology to use ETP sludge as a raw material in making pavement tiles. This minimizes the amount of waste reaching the landfill and eliminates the cost of waste disposal. We have formulated a process that uses a right mix of cement, sand, crushed stones, ETP sludge, and water; followed by a manufacturing and curing process to produce the pavement tiles. The challenge was to devise an ideal mix of ingredients and a curing process to get the required strength with minimal adverse impact on the environment. This year at Pantnagar, we utilized 120 MT of ETP sludge for manufacturing pavement tiles instead of sending it to authorized waste disposal sites for incineration or land filling.

14 Source: Emission Database for Global Atmospheric Research version 3.2

Energy and Climate Change

Energy and climate change risks have significant bearing on the automotive industry in particular, with more than 14% and 16% of the annual global Green House Gas (GHG) emissions being attributed to transportation fuels and industrial processes respectively. Automotive companies are under increasing pressure to demonstrate responsible business behaviour through production of fuel efficient and innovative alternate fuel vehicles and also manage their energy needs efficiently¹⁴. The results of our efforts towards addressing environmental issues are evident through our products (Nano, Vista, Manza) which have best in class fuel efficiency. An Intranet web site ‘yugantar’ has been developed to create consciousness about climate change amongst workforce.

We manage our energy needs in a responsible and efficient manner, undertaking various energy conservation initiatives across our manufacturing plants. This year we have consumed a total of 2,327,673 GJ of direct energy and 2,015,819 GJ of indirect energy. While the overall consumption of energy has increased over last year, our energy consumption per vehicle produced has decreased, which is a testimony of our concerted efforts in this area. The source fuels for our direct energy consumption include high speed diesel (HSD), light diesel oil (LDO), furnace oil (FO), liquefied petroleum gas (LPG), propane and petrol. The indirect energy is the energy sourced externally in the form of electricity. We are actively seeking opportunities to increase our renewable energy consumption. We use wind energy at our Pune complex and solar energy for lighting and heating purposes at our Lucknow plant. Renewable energy amounts to 4.38% of our total energy consumption. We have deployed a special team comprising 17 members to focus on climate change management across locations.

Every year we undertake initiatives across our plants to conserve energy through process modification, process optimization, removal of redundancy and retrofitting of equipments. Each individual plant identifies various opportunities for energy conservation and implements them. Energy performance is considered a critical parameter while assessing the performance of a plant.

This year we were able to conserve over 175,975 GJ of energy owing to our energy conservation efforts and also realized a financial savings of ₹ 85 million. Some of the key energy conservation initiatives undertaken include:

- installation of variable frequency drives and circulation pumps in paint shops
- replacement of the forced draft exhaust arrangements with natural draft exhaust arrangements for the extraction of fumes in the paint shops
- installation of energy efficient motors, LEDS & CFL lamps, wind ventilators, super magnetic dust separators, solar photovoltaic hybrid systems for corridor lighting
- use of natural light in the plants by using polycarbonate translucent sheets
- switching off unwanted high bay lights and shop substation transformers
- downsizing of the motors
- provision of heat resistive covers for furnaces
- introduction of Propane in place of LDO in ovens and heat treatment furnace
- transferring cylinder block core production from shell core method to cold box method.

Energy performance is considered a critical parameter while assessing the performance of a plant.

We believe that every effort made towards conserving energy and improving energy performance is a step towards our goal of a greener environment.

In a first of its kind initiative, we have developed a technology to use ETP sludge as a raw material in making pavement tiles. This minimizes the amount of waste reaching the landfill and eliminates the cost of waste disposal. We have formulated a process that uses a right mix of cement, sand, crushed stones, ETP sludge, and water; followed by a manufacturing and curing process to produce the pavement tiles. The challenge was to devise an ideal mix of ingredients and a curing process to get the required strength with minimal adverse impact on the environment. This year at Pantnagar, we utilized 120 MT of ETP sludge for manufacturing pavement tiles instead of sending it to authorized waste disposal sites for incineration or land filling.

8 Sludge includes Pulp sludge, phosphogypsum sludge, Gelling sludge, Soil bath sludge, ETP sludge, Chromium hydroxide sludge
9 Used Oil (KL) = Motor oil, hydraulic oil, engine oil, turbine oil, steersoil, transmission oil, etc.
10 Includes waste water from processes like water treated by chemical precipitation; oil bonded waste; waste from waste water treatment processes etc.
11 Includes waste water from processes like waste water treatment processes etc.
12 Includes waste water from processes like waste water treatment processes etc.
13 Includes steel containers of paint and oil
14 Source: Emission Database for Global Atmospheric Research version 3.2
We have adopted the Tata Group Climate Change Policy which addresses key climate change issues related to products, processes and services. The policy states that we will strive to minimize year greenhouse gas emissions by promoting fuel blends sourced from non fossil fuel sources, maximizing use of renewable energy, proactively engaging with government in shaping related regulations, conserving energy and other resources through innovation in processes, amongst other things, on an annual basis. We are systematically investing in research and development for introducing technologies that increase fuel efficiency, reduce GHG emissions, and enhance dependency on renewable sources of energy.

We are committed to reduction of GHG emissions throughout the lifecycle of our products. The development of fuel efficient vehicles and vehicles that emit low levels of greenhouse gases is an integral part of our product development and manufacturing strategy. Considering the climate change risk, we are actively involved in partnerships with technology providers to adopt energy efficient technologies not only for products but also for processes. We also participate actively in various National Committees in India which are working on formulating policies and regulations for improvement of the environment, including GHG reduction.

In addition, we voluntarily disclose fuel efficiency information of our passenger vehicles in India in accordance with Society of Indian Automobile Manufacturers (SIAM) guidance. We are also in the process of developing products that meet the future emission norms in India and other countries. We also have products which meet the BS III and BS IV norms in India and are also working on products that will meet the impending Euro VI norms in international markets. The Nano has best in class fuel efficiency and has low CO2 emissions of less than 100g/km.

This year, our operations resulted in direct GHG emissions amounting to 165,299 tonnes of CO2e and indirect GHG emissions amounting to 429,809 tonnes of CO2e. Our climate change and energy conservation initiatives have helped us to avoid 40,572 tonnes of CO2e.

Further, we use R134a which has zero ozone depleting potential as a refrigerant in our products. We also ensure that no refrigerant is released to the atmosphere during any energy recovery and maintenance of air-conditioning equipment of products. The refrigerant charge on any vehicle is first recovered before the system is serviced and recharged. All HVAC system components of our vehicles are checked for refrigerant leakage that are kept well below the specified limit of upcoming norms of 40 grams per year. Our Pune, Jamshedpur and Pantnagar plants use R134a as a refrigerant and coolant and have phased out all ozone depleting substances. Only our Lucknow plant used 163 kg of R-22, this year.

Owing to increasing consumer demand for fuel efficient products, growing concerns of climate change and depleting fossil fuel resources, it is imperative for us to develop vehicles that are fuel efficient and deliver high overall performance. Our product development and innovation efforts are driven by dedicated Engineering Research Center (ERC) teams working at our manufacturing plants. We are working on using composite materials as a significant initiative to reduce the weight of our vehicles and thereby improve their fuel efficiency. We are also partnering with many leading technological institutes in India to discover opportunities to develop energy efficient technologies. An exploratory project along with IIT Madras has been initiated for the use of hydrogen fuel and we are working with the steering committee of National Hydrogen Energy board to find the ways to harness hydrogen as a potential energy source. Development of CNG vehicles, electric vehicles and hybrids are at the forefront of our efforts. We have manufactured CNG versions of buses, light commercial vehicles, and ACE goods carrier, along with LPG versions of Indica. Tata Motors has also promoted the hub-and-spoke approach for goods and passenger movement which has enabled better turnaround time, improved fuel efficiency and smarter logistic solutions. Some of our key initiatives towards developing alternate fuel vehicles include:

- **Hybrid electric car** The concept hybrid electric car has been demonstrated while prototypes are under development. The hybrid car consists of a mechanical and an electric power train. Hybrid vehicles achieve significant improvement in fuel economy by limiting the IC engine’s operating region so as to maximise the efficiency. A traction requirement outside the optimum operating region of the engine is handled by the electric motor and battery.

- **Electric traction system for buses** We are developing an electric traction system for buses which is an all-electric power train using motors and inverters for driving the engine. The power source for the electric supply can be on-board, like a small diesel / CNG Genset or a fuel cell, or off-board, as in the case of a trolley bus. The vehicle will also have a bank of batteries onboard to provide high, intermittent power for acceleration and also to recover the braking energy using regeneration.

- **Series hybrid bus** We are developing a diesel / CNG hybrid bus to test the electric traction system that we have developed. The traction system is all electric and a down-sized IC engine runs a generator to charge the batteries.

- **Parallel hybrid bus** We are developing a parallel hybrid bus on the city bus platform as an alternate solution to a series hybrid bus.

- **Fuel cell bus** Fuel cell bus is a derivative of an electric bus, in that the electric power source is a fuel cell. A fuel cell is a primary battery, which oxidises hydrogen to water through a catalyst, generating electrical energy during the process. The oxidation occurs at much lower temperature than combustion temperatures of hydrogen, resulting in no emissions other than water.

- **Electric car** We are developing an electric car based on the India platform targeted at European markets where there is availability of surplus electricity. The vehicle will use high energy density batteries to give a meaningful driving range between charges.

- **Electric small commercial vehicle** An all-electric small commercial vehicle is under development at Tata Motors for North America and Europe.

- **Bus rapid transit system** This system, developed by us based on use of low floor CNG buses with high capacity, is a sustainable solution for mass transportation problems in metros like Delhi, Mumbai and Bengaluru. It proposes use of special lanes on the routes reserved for such buses to facilitate faster movement and is based on Intelligent Transportation System model (ITS). It is enabled by Information, communication, smart card and GPS technologies to provide better service to commuters.

We have continued our endeavour to absorb the best of technologies for our product range to meet the requirements of a globally competitive market. All of our vehicles and engines are compliant with the prevalent regulatory norms in India and also in the countries to which they are exported.

**Biodiversity Management**

We have established environmental cells at each of the manufacturing locations, which ensure that the biodiversity value of the areas in which we operate is maintained and enhanced by our presence. Our plants at Pantnagar, Jamshedpur and Pune are located in industrial areas as designated by the respective State authorities, and hence by design, have minimal impact on biodiversity. Our Pune unit has, since inception, taken a number of steps to preserve the ecological value of the land in which it operates, including creation of four ponds, two lakes and covering 242 acres of the land with trees. Marshy / swampy areas have been developed all along the margin of the water bodies, with the specific intention of creating ideal nesting spots for birds. The Pantnagar plant has facilitated plantation of 125 species of trees over an area of 40 acres. As a result of these efforts, numerous birds have been sighted in those areas.
Cruising Towards A Greener Environment

Other Air Emissions

Apart from GHG, our other air emissions include Total Particulate Matter (TPM), Oxides of Sulphur (SOx), and Oxides of Nitrogen (NOx). These are primarily related to fuel use and manufacturing processes. We are guided by the local regulations for monitoring and reducing the air emissions. We carry out periodical monitoring of air emissions and report the same to local pollution control authorities. We manage our air emissions within the prescribed limits and strive to reduce them beyond compliance levels. This year we emitted 341.86 tonnes, 482.74 tonnes and 42.35 tonnes of TPM, SOx and NOx respectively.

Water Management

In recent years, water management has been increasingly recognized as a pressing environmental issue. We have adopted rigorous standards to reduce water consumption at our plants and facilities and have also strived to create resource awareness and education programmes on the subject. We are committed to reducing our water footprint by increasing operational efficiencies, introducing innovative process modifications, and increasing focus on reuse and recycle of water. The total water withdrawal at our plants increased by 5.26% from the previous year on account of increased production, however the per vehicle water consumption reduced by around 20%.

Our water consumption is primarily sourced from municipal supplies at our plants and our dependence on ground water is less than 20% of our total requirement. In some of our plants, we have installed rain water harvesting structures to utilize rain water for non-process activities. At our Lucknow plant, a rainwater harvesting scheme with a total harvesting potential of 1,456.500 kilolitres per annum is under implementation. Four percolation pits with recharge shafts have been erected in first phase and two more would be erected in the second phase. At Jamshedpur, the design of the facility ensures that we can meet nearly four to five months of our fresh water requirement from the harvesting pond.

Wherever possible, we recycle wastewater and thus reduce wastewater discharge and fresh water intake. In 2009-10, we reused 14% of the total water consumption in our processes through various initiatives across our plants. The total wastewater discharged this year was close to 2,850,208 kilolitres across all our locations. The ETP at our Pune plant was not operational for a significant period of time during this year which in turn reflects in the decrease of the quantum of reused water.

At Sanand, we have undertaken focussed efforts towards good environment management practices, in line with our internal policies. We have replaced water cooled chillers with air cooled chillers of capacity 2800 TR which have resulted in saving nearly 340,000 litres of water per day. We have constructed a water body within our premises, in order to reduce our dependence on municipal water and also to enhance the level of the ground water table in the area. The excavation for the water body was initiated along with the civil work for the construction of the plant. Further, a total of 1,500 trees of different varieties were planted surrounding the water body. Different species of migratory birds have also been sighted at the water body.

At Sanand, we are working with the local community under the aegis of Samarth Moopankar Development foundation, in partnership with the Gujarat government. We aim to provide reverse osmosis plants to the 20 villages that surround the Sanand manufacturing unit. This year the Sanand team won the prestigious Shram Award given for outstanding contribution in the area of welfare, safety, innovation and productivity improvement by the Ministry of Labour and Employment under Gujarat Government’s Rajyasarkar Shram Paritoshik Yojana. Mr. Naresh Khobragade and Mr. Rasik Thakor from the powertrain shop received the Shram Veer and Shram Shree award for their contribution in safety and productivity improvement in their work area.

Singur to Sanand

In an operation unprecedented and unparalleled in the world of automotive manufacturing, Tata Nano’s original plant at Singur, West Bengal was dismantled, transported and re-assembled about 2100 km away at Sanand, Gujarat. The operation started in November 2008 and by the end of May 2009, the dismantling and trans-shipment job was complete and re-installation began in Sanand. By August 2009, about 70% of the re-installation work had been completed and by November 2009, pilot production was ready to begin. It is due to the unswerving commitment and the efforts of our employees that we were able to achieve this humongous task of rebuilting an entire plant with limited procurement of new materials and minimal impact on the environment.

At Sanand, we have undertaken focussed efforts towards good environment management practices, in line with our internal policies. We have replaced water cooled chillers with air cooled chillers of capacity 2800 TR which have resulted in saving nearly 340,000 litres of water per day. We have constructed a water body within our premises, in order to reduce our dependence on municipal water and also to enhance the level of the ground water table in the area. The excavation for the water body was initiated along with the civil work for the construction of the plant. Further, a total of 1,500 trees of different varieties were planted surrounding the water body. Different species of migratory birds have also been sighted at the water body.

At Sanand, we are working with the local community under the aegis of Samarth Moopankar Development foundation, in partnership with the Gujarat government. We aim to provide reverse osmosis plants to the 20 villages that surround the Sanand manufacturing unit. This year the Sanand team won the prestigious Shram Award given for outstanding contribution in the area of welfare, safety, innovation and productivity improvement by the Ministry of Labour and Employment under Gujarat Government’s Rajyasarkar Shram Paritoshik Yojana. Mr. Naresh Khobragade and Mr. Rasik Thakor from the powertrain shop received the Shram Veer and Shram Shree award for their contribution in safety and productivity improvement in their work area.

15 The NOx emissions are currently not calculated for our Pune, Jamshedpur and Pantnagar manufacturing plants. We aim to report the NOx emissions for all manufacturing plants next year.
ENSURING A SAFE JOURNEY

We have taken great care to ensure that every journey with Tata Motors, either in our vehicles or in our manufacturing locations, is a safe one.

Our customers deserve vehicles that meet highest safety standards and our employees and associates deserve a safe and healthy working environment.
ENSURING A SAFE JOURNEY

Occupational Health and Safety

Sound occupational health and safety management practices have yielded numerous tangible benefits like lowered costs of treatment, decreased hospitalization, reduced absenteeism and increased employee satisfaction. Keeping this in background, we have taken a number of steps to ensure that our workers and staff are safe and healthy. We have articulated an organization wide occupational health and safety policy, which maintains our commitment to being an injury-free and occupational disease-free, safe organisation.

All our manufacturing units take utmost care to ensure employee well being, and have programmes for prevention, detection, treatment and monitoring of lifestyle related diseases, epidemics and other illnesses. Occupational health related programmes are conducted for target groups like employees working in the foundry, paint shop, welding line, etc. to make them aware about various health hazards and precautions to be taken regarding adverse health effects of their tasks. We do not have any incidents of workers being affected by an occupational disease in the year.

In the year 2009-10, there was a ‘Swine Flu’ epidemic in Pune. In a short span of 10 days, we organized awareness lectures for around 8,400 employees, giving salient features of signs and symptoms and precautions to be taken to prevent the spread of the disease. This helped us avoid the spread of H1N1 infection amongst our employees and their family members. Further, in Pune, there are over 800 employees who are suffering from diabetes and hypertension. We have the following facilities to motivate these employees towards proper treatment and thereby help them avoid complications arising out of these diseases.

• In-house blood testing facility on the last Sunday of every month
• Health awareness lectures by experts on various topics like diet, complications and control measures to be taken etc.
• A diabetic card is given to all diabetic employees to keep track of the tests to be done at specified intervals and their results
• Number of health education programmes conducted: 5
• Number of employees benefited: 571

Our Lucknow plant organised free cardiac and neuro checkup camps for our employees. Our Jamshedpur plant has conducted health awareness sessions on hypertension, diabetes, coronary artery disease, water borne diseases such as typhoid fever and Hepatitis A, Hepatitis B, HIV / AIDS, post-retirement health management, first-aid management and diet management during the year. A 400 bed hospital functions as a secondary care unit and all categories of employees and their eligible dependents are supplied free medicine from the hospital. Senior citizens and on-roll employees receive special privileges in treatment.

For our contractual labour, we have undertaken a number of health awareness initiatives. A free eye check-up camp was organized for contractual employees in collaboration with H V Desai Eye Institute. 163 individuals were issued corrective glasses at subsidized rates. We also organized a health and safety joint programme for scrap yard contractor employees in Pune. 17 female contractor employees had a medical check up and sun protective aprons and scarves were distributed to them, to protect them from the summer heat.

Safety concern and awareness is a core focus area and we have formed a cross-location team to improve the safety standards and practices. Safety reporting has been standardised across and an intranet portal for centralized safety data management has been initiated. We have created a bay ownership concept to drive safety awareness and have also initiated behavioural training on safety to employees. All our plants have safety committees, having equal representation from management and non-management cadres.

Our safety performance* over the years across our plants is as follows:

<table>
<thead>
<tr>
<th>Total safety performance of Plants - Permanent Employees</th>
<th>Units</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near misses</td>
<td>Numbers</td>
<td>119</td>
<td>240</td>
<td>1,350</td>
</tr>
<tr>
<td>Reportable injuries</td>
<td>Numbers</td>
<td>288</td>
<td>161</td>
<td>145</td>
</tr>
<tr>
<td>Lost days</td>
<td>Numbers</td>
<td>3,556</td>
<td>2,065</td>
<td>1,931</td>
</tr>
<tr>
<td>Fatalities</td>
<td>Numbers</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Minor injuries</td>
<td>Numbers</td>
<td>395</td>
<td>387</td>
<td>324</td>
</tr>
<tr>
<td>First aid cases</td>
<td>Numbers</td>
<td>713</td>
<td>689</td>
<td>519</td>
</tr>
<tr>
<td>Man-hours worked</td>
<td>Man-hours</td>
<td>99,775,004</td>
<td>87,476,234</td>
<td>97,479,879</td>
</tr>
</tbody>
</table>

The decreased number of reportable injuries, lost days, fatalities, minor injuries and first aid cases are an indication of our strengthened safety systems and of increased awareness amongst our employees. This has resulted in better reporting of near misses by our employees. Across plants we have introduced a zero-accident plan, and have designated safety owners in each bay, who report all incidents and unsafe practices in a systematic manner and take steps to ensure that no dangerous practices are followed. Cross bay safety audits are also conducted to further strengthen the system. This has reduced the number of incidents and accidents.

This year, we had three fatalities amongst our contract workers. We are taking concerted steps to ensure that no fatalities occur in future. We have looked into all the accidents and are taking our best efforts to provide help to the families of the contract workers who have expired.

Product Safety

One of the most critical parameter on which our products are judged is their safety level, and hence we, at Tata Motors have taken utmost care to ensure that our products adhere to the highest standards of safety. Our aim is to create a robust system for developing safe products through research and innovation. We have been putting lot of efforts through ERC to improve both active and passive vehicular safety. We go beyond legal requirements to provide safer products – an example being the truck ACE, which has been designed to meet stringent crash safety standards, which go well beyond the legislative norms.

We have been continuously upgrading product safety with new technologies being brought in. Tata Motors is the first Indian manufacturer to develop and introduce airbags in vehicles. We are still the only manufacturer in this country to have a crash test facility. Our ERC is adequately equipped with state of the art facilities to address specifically the issues of customer health and safety. It has facilities like the hemi anechoic chamber for NHV, a pedestrian safety testing facility, a pendulum impact test facility, a bus rollover test facility, and a modern crash test facility for testing our new products for passenger safety. We have a testing facility for developing vehicles with lower noise and vibration levels, and an engine emissions testing facility to develop products meeting international standards. We do acknowledge that the health and safety impacts of our products are not studied across the entire life cycle, but we are taking steps to address this gap. In future, we aim to do a life cycle analysis of the environmental, safety, health and social impacts of our products.

We have undertaken a comprehensive investigation related to the cause of fire in two Tata Nanos’. A 20-member internal team and an independent forensic expert studied the incidents thoroughly. The investigation revealed that the incidents were isolated instances and the reasons for each were unrelated and these inspections did not constitute a recall. The first incident was found to have remnants of a foreign object on the hot exhaust system which most probably led to combustion. In the incident of the second car which was being delivered to a dealership, there was evidence of a ruptured fuel line. Taking all this into account, we have decided to make the car even more robust. We will do this by providing additional protection in the exhaust system and the electrical system.

Special Features for school buses:

• Anti skid flooring
• STOP sign on door
• Safe arm rest
• Tooth guard
• Grab handle
• Wide windows
• Window guard rails – 4 numbers
• Emergency exit
• Seat belts in AC bus models
• Anti skid step edge beading
• Door open warning buzzer
• Retractable foot step – in 52 seat MCV bus

Special Features of CNG Buses:

• Stainless steel CNG piping protected with PVC coating
• SWAGELOK pipe fittings to prevent leakage and increase reliability
• Battery cut off switch for enhanced safety
• A blast disc inside every cylinder valve to ensure safety in case of an accidental increase in system pressure
• Catalytic converter temperature sensor indication for added safety
• High pressure solenoid for safety in HP line
• Pressure regulator with venting for additional safety
Our customer satisfaction studies with current Tata Nano owners indicate that about 85% are satisfied or very satisfied with the car, because of its being 'small yet spacious', its performance, manoeuvrability, durability, low operating cost and safety. Some owners have taken their Nanas on country-wide trips or to altitudes like Khardungla, the world's highest motor able road. This adequately corroborates the Tata Nano's reliability and safety, as was seen during the validation of the car with about 300 prototypes which covered more than 2 million kilometres of safe operation before launch.

Our facilities enable development of products meeting safety and environmental regulations. Examples of special features used in our products for preserving customer health and safety include: anti-skid braking systems, air bags, ergonomically designed seating systems with lumbar support, Euro IV compliant engines and non-CFC based vehicle air conditioners. We have also obtained homologation certificates for export markets from authorized test agencies. Our products are labelled for identification of parts as per EEC directives.

Winger
India's first maxi van, the Winger is used extensively to transport children, and has special safety features for this purpose. Its low floor height helps in easy entry and exit and thus chances of getting hurt are significantly reduced. Its sliding door with a child lock prevents children from opening it from the inside, and ensures that only adults can operate the door. Its independent front suspension makes the ride very smooth, and it has a twin door tailgate provision for emergency exit. Its small turning circle diameter enables the vehicle to go into small lanes to pick up/drop children. Its low center of gravity ensures stability and an anti-roll bar in the front and rear makes the vehicle less prone to toppling.

Magic
Tata Magic is India's first 4-wheeled small commercial passenger vehicle used in public transportation. Tata Magic offers a significantly more comfortable and safer ride for its passengers compared to the 3-wheeler auto-rickshaws and this has been a major reason it has seen success all over India. The vehicle comes with safety features that are best in class and at par with larger LCV/ICV buses. Some of the features that translate into increased passenger safety are its high strength steel body with tubular construction which ensures that the roof is even if the vehicle topples and its vacuum assisted brakes for excellent braking performance. The Magic is roof crush and static roll compliant and has door intrusion beams to minimize injury on any impact. It has large, powerful halogen headlamps for all night and highway driving and high mounted rear brake lights with reverse lamps, reflex reflectors for all weather day and night driving. Its twin wipers with a windshield spray facilitate safer performance, and hazard warning lights and blinkers ensure safety in case of break-down on highways.

Venture
Meeting the frontal crash norms, the Tata Venture ensures the safety of the driver and the co-passenger with thick A-pillars and crumple zones along the three-stage collapsible steering column. Every passenger is secured by seat belts and side beams for side impact protection. The vehicle has also passed the tough SMV SS American regulations for roof crush, and tests for static roll over. Further adding to the sense of safety is the reverse guide system, headlamps for night driving, fog lamps, high seating position for better visibility, and rear wash, wipe and demister. The engine immobilizer completes the safety cover.
The force with which a vehicle moves is determined by the engine that powers it.

Together, our employees form an efficient and powerful engine that propels Tata Motors ahead, empowering us to spread our wings across the world.
At Tata Motors, our employees are our greatest asset, and we have taken concerted steps to ensure employee well being. We have developed a comprehensive human resource strategy which addresses key aspects of human resource development. Some of its key features are:

- A Tata Code of Conduct (TCoC) and fair business practices, which covers both our passenger cars business and commercial vehicles business. All our employees have signed the TCoC, which mandates that bribery, giving or receiving gifts or any other form of corruption would be dealt with very firmly by the organisation, and misdemeanours might even lead to termination. In the reporting period, there have been no incidents of corruption.

- A fair and objective performance management system linked to the performance of the businesses which identifies and differentiates high performers while offering separation avenues for non-performers. All eligible employees undergo performance and career development reviews annually.

- Creation of a common pool of talented managers across Tata Motors with a view to increasing their mobility through inter-company job rotation.

- Evolution of performance based compensation packages to attract and retain talent within Tata Sons and the Tata Sons promoted entities.

- Development of comprehensive training programmes to impart and continuously upgrade the industry / function specific skills.

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As on 31st March 2010, we had 24,310 permanent employees (including employees at Sanand and Singur). This year the attrition rate for management cadre employees was 3.82 percent at PCBU and 2.69 percent at CVBU. The contract labour at any given point of time varies across operations. During the year, a total 19,097,312 man-hours of contractual labour were employed across operations.

We are committed to building the competences of our employees and improving their performance through training and development. Our focus is on identifying gaps in our employees’ competencies and preparing employees for changes in competitive environments, as well as to meet organizational challenges. Our contractual and permanent workers were trained for over 440,580 man hours. Our management cadre employees underwent training for over 64,900 man hours.

Some of the focus areas in training during the last year were leadership, innovation management and internationalization besides programmes to drive a change in our employees’ outlook as we continue to develop as a global competitor. Developmental initiatives for our senior leadership were undertaken through international programmes at various premier institutions around the world. The entire senior leadership underwent training for over 64,900 man hours.

In order to emphasize the sharing of skills across our locations and functions extensive technical training programmes were organized in Pune, Jamshedpur and Lucknow. The technical exposure was enhanced further through international training and participation at international seminars. At Jamshedpur, Pune and Lucknow, we have established training divisions that impart basic skills in various trades like milling, grinding and welding to our young apprentices. This year we received the National Best Training Establishment award from the Government of India for the eighth time.

We prefer to hire people from the local community and contribute to the development of the local economy. We also provide a number of benefits to our full time employees like gratuity, superannuation, Bhavishya Kalyan Yojana (BKY), post-retirement medicare scheme, provident fund, and compensated absences.

We are an equal opportunity employer, and employ candidates only on the basis of merit. Remuneration is also paid purely on the basis of merit and rank, and no other factors like gender, caste, creed, marital status are given attention. All our non-management employees are members of labour unions. Employee wages are paid in accordance with wage agreements that have varying terms (typically three years) at different locations. We comply with all the legal requirements of wage payments. Any operational changes that are made are discussed with the union members.

At Tata Motors, we respect Human Rights as enunciated by the International Labour Organisation and have drawn out a structured Human Rights policy. We do not engage anyone under the age of 18 years for any operations or services unless it is part of a government approved job training or apprenticeship programme. We also do not allow any forced or compulsory labour. This year, there were no incidents of human rights violations across operations. Additionally, we expect our channel partners and contractors to adhere to business principles consistent to our own.

Innovation @ work

We have created a conducive environment for innovations by establishing a process framework and conducting competitions like Imaginering, Innovation, Innovativa and Innovista (Tata group programme). All these innovative ideas get captured in “Knowledge Through Learning” and are taken up for replication. More than 5000 innovative ideas have been captured this year and key channel partners and vendors have also contributed to it.

Our senior leadership has created a culture which fosters and drives innovation using a systematic approach. Teams and individuals are encouraged to explore new technologies, alternative methods and processes, and to submit ideas. Employee innovation has yielded cost savings, enhanced efficiencies and other performance improvements. Most of our innovations come from the market i.e. by listening to customers.
We care for the communities we operate in, working hard to enhance their quality of life in aspects of employability, health, education and environment.

The ultimate responsibility of a driver is to take care to manoeuvre the vehicle in a way that creates no harm for anyone in the neighbourhood.
We envision the prospept of the entire region in which we operate. It is from this standpoint that we initiate several developmental projects in the villages that we adopt around our manufacturing units. We realize that development can truly be sustainable if people develop a sense of ownership and belongingness towards the projects. Hence we follow a rigorous process for designing, implementing, monitoring and evaluating our programmes. We believe that our financial performance is not only the driver for our success and growth and hence we are committed to improving the quality of life of communities, and till date, we have touched the lives of more than a million citizens. Our social responsibility initiatives are aimed at bridging distances – between the aspiration for a better quality of life and its realisation. Our activities are focussed on four main thrust areas of Health, Education, Empowerment and Environment.

Assembling community perception
This year we conducted a community survey at Pune with a sample size of 300 individuals with a motive of getting better understanding of community perception and to comprehend the emerging needs of the community. The survey highlighted that a significant 45% of people benefited from the infrastructure built by us. Also more than 90% agreed that we were committed towards social responsibility and more than 45% agreed that we were environmentally responsible in comparison to their peers. The graphs below depict the community expectations based on which we categorised into four major categories namely employability, environment, education and health on which our initiatives are based on.

Enhancing Employability
Our actions on employability thrust areas are focused on youth and women. They run across the chain from training students and initiate to actual facilitation of income-generation. Women have been trained in appropriate skills and facilitated to establish cooperative societies, manufacturing a diverse range of items from traditional food items to components for our vehicles. Farm development through enhancing irrigational facilities, introducing modern agricultural practices and development of women plays an important role in the overall advancement of India.

Following are some of the initiatives adopted by us across operations:

**Vocational Training:** Training is provided to the socially and economically disadvantaged groups. Villagers gather a variety of seeds from forests and fruit trees and are transplanted to pits in the waste lands in the village.

**Social Forestry:** Social forestry is a very popular programme where Tata Motors raises more than 150,000 fruit and timber saplings in its own nurseries at Khakripara and Rangatarh Rural Development Centres by involving villagers. Villagers gather a variety of seeds from forests and fruit trees and are transplanted to pits in the waste lands in the village. The surveyed highlighted that a significant 43% of people benefited from the initiative according to the community perception survey.

**Affirmative Action:** In line with the Tata Group initiative of Affirmative Action, the company is implementing initiatives across the 4 Es of Employment, Entrepreneurship, Employability and Education, with a clear focus on the latter for the Scheduled Castes and Scheduled Tribes.

Mr. Yugraj of Muzaffar Mau village in Barabanki district in Uttar Pradesh is a scheduled caste who is now an entrepreneur and the proud owner of Swastik Electric. Yugraj was earlier making his livelihood through ad-hoc jobs and without any specific skills. The Samaj Vikas Kendra Society of Tata Motors helped him train in maintenance of air-conditioning machines, refrigerators and such appliances.

Mr. Naresh Kumar from Industrial Technical Institute, Thane, Maharashtra, was trained in maintenance of air conditioning machines, refrigerators and such appliances at Tata Motors, working in sub-assembly work, Lucknow. The society has also provided practical technical inputs.

Mr. Naresh Kumar from Industrial Technical Institute, Thane, Maharashtra, & Ms. Ramita Bano from village Goela was trained in Chikan work (local handicraft of Lucknow) by Samaj Vikas Kendra, a society supported by Tata Motors Lucknow. The society has also provided market linkages for products carrying this traditional handicraft.

Ms. Sarla Mandal, an Anganwadi Sevika from Bandih village, Potta Block, narrates how Tata Motors Jamshedpur created livelihood opportunities in her community.

"Bandh is a small village close to Jamshedpur which is my home. As my house bores the main road, I see the endless stream of vehicles commuting daily, mostly on motorcycles and form the villages to and from Jamshedpur town. There is always movement of tractors, small carry vans and trucks bringing commercial goods from the town to the villages and taking items from the village like ‘kendu’ leaves and fruit, timber, paal, jaggery, fish and medicinal seeds collected from the forest.

Despite there being a huge market for village products in the town, the scale of production in the villages was small and the lack of a fair price bargaining mechanism gave urban traders a powerful hand over farmers. We could not rely solely on agriculture for our income either because of the lack of irrigation. There was a lack of viable livelihood opportunities in the village.

It was Tata Motors, which first formed women’s self-help groups in my village. I became very active in the Bandh group and was nominated as President. Gradually, with accumulation of a corpus, we started a community enterprise making palice rice, jaggery and ground gram powder for supply to ‘Anganwari Kendras’. With the help of Tata Motor’s officials, our SHG was linked to a block’s scheme through which we got a revolving fund of Rs 23,000 which helped us scale up the enterprise and diversify. Like me, hundreds of women have benefited from such SHIS which have been formed by Tata Motors, promoting a variety of cash trades.

Horturing Skills: We run several training programmes within the manufacturing units like the Full-time Apprenticeship Programme (FTA), Job Trainee Apprenticeship Programme (JTA) and Technical Vocational Apprenticeship Programme (TVaP) which have catered to the advancement of students by significantly raising employment. Reservation of seats for SC/ST and OBC candidates in these programmes are as per the Apprentice Act, 1995. In the last three years, more than 400 boys from the reserved category have been trained.

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Tree transplantation: At Panthnagar, we initiated a tree transplantation initiative wherein the trees that required to be cut were relocated and replanted at an appropriate location. This procedure of relocation was done taking safety measures like application of pesticides on the roots of the trees to avoid fungal infection and insect attack. Trees that were relocated were replanted with proper support and balance and their growth was monitored. This resulted in saving 25 years of growing a new tree of the same size.

Helping farmers: Sushen Melandi is happy farmer from the Khaiboni village of Jamshedpur. The reason for his happiness is that he can now sell his farm products directly to the market without depending on the middlemen who made hefty profits out of his produce, thanks to the guidance of Gram Vikas Kendra, a Tata Motors-supported society. Additionally, his income has increased multifold as Gram Vikas Kendra has developed irrigation in villages in regions receiving scanty rainfall. These villages now have a regular water supply around the year and water has enabled the farmers in the Khaiboni village to cultivate crops throughout the year despite the unpredictable rainfall.

Education
To contribute towards developing a sustainable society, and to fulfill our role as a corporate citizen, we lay a lot of emphasis on educational activities across India. Our support towards education runs across the chain from supporting schools through upgrading existing infrastructure and facilities to improving the quality of education through teacher’s training programmes and extra-curricular activities for the children. We create school infrastructure, support teachers’ training, provide scholarships and help organizations, working among the disadvantaged or special children. Apart from many different scholarship programmes, we also facilitate provision of infrastructure support in small and remote villages. In 2009-10 alone, more than 20,000 students have benefited from scholarships and help organizations, working among the disadvantaged or special children. Apart from this, we also provide regular training programmes for teachers and extracurricular activities for children.

Several scholarship programmes have been instituted by Tata Motors to improve the access of students out of which 189 are from socially marginalized sections of the society. These students, belonging to more than 20 schools spread all across 50 villages, are not only a part of several skill building workshops, but are also provided with study material related to their education.

DNA of Vidyadhaman
• Address softer issues - To organize and be a part of different workshops and training programmes that range from residential camps, personality development programmes, skill building exercises, competitions, etc.
• To strengthen the school - To make sure that the focus is primarily on enhancing school infrastructure like lighting provision in classrooms, toilet facilities, drinking water, library, etc. and to organize school level co-curricular and extracurricular activities.
• To have an organic link with the industry - The employees from Tata Motors Ltd. mentor these children and work together to identify and mitigate problems through focused initiatives. As on today, 150 volunteers are mentoring the students by regular school and home visits. More than 5,000 volunteering hours have been invested for these children.

<table>
<thead>
<tr>
<th>Profile</th>
<th>2008-2009</th>
<th>2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Intake</td>
<td>111</td>
<td>117</td>
</tr>
<tr>
<td>Girls</td>
<td>53</td>
<td>65</td>
</tr>
<tr>
<td>SC/ST</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>Schools</td>
<td>15</td>
<td>20</td>
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</tbody>
</table>

“Coming here has induced a new confidence in me. I have been able to overcome my phobia for English. It was not only focused on English but also on other vital information. The environment was very different from our regular school setting” - Karlika Sodose, Shivaji Vidyalaya, Dehane.

Health
In health, our intervention is in both preventive and curative health care. We provide vehicle support to relevant organizations. We also run our own programmes, through health centres and mobile health clinics, for prenatal care for expectant mothers, immunization of children, and general health check-up. To ensure sustainability of the gains, health workers from the community are trained for continuous assistance.

Safe water being key to health, permanent infrastructure is created where necessary. Tanker facilities are also deployed in summer months in remote and water parched villages. Sumant Moolgaokar Development Foundation, formed by matching contributions of Tata Motors and our employees, has undertaken a National Drinking Water project, Amrutdhara, under which 100 selected villages across the country will receive safe and perennial drinking water by 2013. Under this scheme, hand pumps were installed in five villages near Lucknow in the reporting period.

Simultaneously, sanitation is being improved directly at the household level. More than 20 villages in the project area of Tata Motors have achieved 100% sanitation. Two panchayats and 3 villages have received the “Nirmal Gram Puruskar” from the Government of India.

Medical mobile vans have been deployed in several remote villages in Maharashtra. These mobile vans are equipped with one doctor and nurse each. The doctors also spread awareness on hygiene and sanitation through various channels such as talks and publications. In addition, medical consultation is provided free of charge whereas medications are provided at a nominal rate for each patient and laboratory tests are conducted at a subsidised cost. Furthermore, family planning consultations and cataract screenings are frequently conducted and the operations are carried out at the clinics supported by Tata Motors either free of charge or at an extremely subsidized rate. To improve the overall health conditions in the villages, we have provided infrastructure such as hand pumps and wells for safe perennial drinking water, roads, drainage systems and toilet blocks in schools.

According to a survey by UNICEF, there are over 4000 malnourished children in the Singhbhum district alone. Out of these, 500 children are severely malnourished. Keeping this in mind, we, at Jamshedpur, in partnership with UNICEF, to establish a full 6 bedded Mahanutrition Treatment Centre (MTC). 4 trained doctors, 5 para-medical staff and 2 attendants provide personalized service and care to the children and their mothers, round the clock. The MTC is equipped with advanced equipments and facilities. Our initiative this year is to create infrastructure and child health, nutrition support, sanitation and drinking water solution sets. With successful execution of 134 health camps, over 4,000 people belonging to backward classes in remote rural areas have been treated in the past one year.

The following table summarizes the overall impact of initiatives across Tata Motors undertaken this year.

| Number of beneficiaries from curative health services | 85, 871 |
| Number of beneficiaries from preventive health services | 13,694 |
| Number of low-cost toilets built | 5,571 |
| Number of villagers provided with safe drinking water | 3,400 |

Tata Motors has championed the cause of identifying, curing and rehabilitating the people afflicted with leprosy in the districts of east Singhuban, Ichagarh and Nirmi blocks of Sarakeila Khasawan. We, in collaboration with NJMIS (Nav Jagrat Manav Samaj) at Jamshedpur, are dedicated to the cause of leprosy eradication and rehabilitation. This has resulted in the prevalence rate of leprosy coming down from 21 per 1,000 to less than 1 per 1,000 persons. During the last year, through house to house and school surveys, 111,140 people were examined and 106 new cases were detected and brought for treatment.

Profile  Academic Year

<table>
<thead>
<tr>
<th>Profile</th>
<th>2008-2009</th>
<th>2009-2010</th>
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</thead>
<tbody>
<tr>
<td>Total Intake</td>
<td>111</td>
<td>117</td>
</tr>
<tr>
<td>Girls</td>
<td>53</td>
<td>65</td>
</tr>
<tr>
<td>SC/ST</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>Schools</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>
Economic Indicators
Our economic performance has been steadily improving, and our aim is to spread our wings far beyond India. We have consolidated our position as the market leader in commercial vehicles in India, and are among the top three in passenger vehicles in the country. We had a consolidated revenue of ` 925.19 billion in 2009-10, and intend to grow further. Our economic policies are formulated based on a number of factors, including market conditions, consumer preferences, our past performance, government regulations and our corporate governance ethics, amongst others. We have also made a commitment to spend generously on initiatives that uplift the community surrounding us, enhance the quality of life of our employees, suppliers, partners and vendors and have a positive effect on the environment.

Environmental Indicators
Our manufacturing divisions are certified for ISO 14001:2004 - environmental management system. We have laid emphasis on conservation initiatives, especially energy, waste management and water conservation. We have also taken efforts to use materials that environmentally benign in our process and products. We are compliant with all the laws of countries to which we export our vehicles. The Tata Business Excellence Model for our commercial and passenger vehicles businesses outlines our commitment to preserve the environment.

Labour Practices Indicators
We have outlined a Health and Safety Policy, which specifies that safety and well being of our employees is of utmost importance to us. All our manufacturing divisions are certified for OSHAS 18001:2007 - safety and occupational health management systems. Further, our accident and lost day rates are decreasing year on year, which is an indication of our strengthened safety systems.

Human Rights Indicators
The Tata Code of Conduct emphasises the importance of workplace ethics and every employee is expected to adhere to the Code. We have a whistle blower policy in place to detect and remedy any non compliance to the Code or any laws or regulations. We have a strict policy against bribery and corruption, and take all steps to ensure that our operations are as transparent as possible. We respect human rights at the workplace as defined by the International Labour Organisation. We do not employ any children or forced labour and all our partners, subsidiaries, dealers, etc. are expected to follow our Human Rights Policy.

Society Indicators
Our social initiatives programme is in sync with the goals and vision of the organization. Our well defined CSR execution process demonstrates our approach towards the needs of communities. The areas that we focus on are enhancing employability, conserving the environment, promoting healthcare and imparting education. As a responsible automobile manufacturer we have entered into a partnership with the Government of Punjab to facilitate the promotion of safe driving and road safety. With respect to agriculture, we partnered with the Government to provide fertilizers and pesticides, along with the necessary training for their usage. With respect to health, our initiatives are on the lines of maternal and child health, nutrition support, sanitation and drinking water solution sets. Our initiatives for imparting education range from providing scholarships, infrastructure support, training programmes for teachers to extracurricular activities.

Product Responsibility Indicators
We have a dedicated research and development team, called the ERC team, which designs and develops superior products. We lay special emphasis on safety of our products and have invested heavily in developing facilities like a crash test facility and a hemi anechoic chamber, amongst others. Over 4 million of our vehicles are on the road, and they are a testimony of the quality of our products and of our sound policies. Our Tata Business Excellence Model reports for commercial and passenger vehicles outline our commitment to pursue relentlessly our goal of developing products that are extremely safe, for passengers, pedestrians and the environment alike.
Crusing towards a greener environment

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EC2, EN1, EN2, EN3, EN4, EN5, EN6, EN7, EN8, EN10, EN11, EN14, EN16, EN18, EN19, EN20, EN21, EN22, EN23, EN26, EN27, EN30

Principle 7
EN9 – None of our water sources are significantly affected by our withdrawals.
EN11 – None of our operations are located close to protected or reserved areas.
EN12, EN13, EN15 – Not Applicable.
EN17 – We are augmenting our capabilities to monitor other relevant GHG emissions. Other GHG emissions are not reported for 2009-10.
EN24 – Not Applicable.
EN25 – No water body or habitat is significantly affected by our water discharge or runoff.
EN27 – While we do not restrain the packaging material of our products sold, we do reuse packaging obtained from our suppliers.
EN28 – We have not had any fines or sanctions imposed on us for non compliance with environmental laws.

Ensuring a safe journey

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LA6, LA7, LA8, PR1, PR3, (partial) PR9

LA9 – We abide by all existing laws related to wage payments and wage agreements.
PR6 – We adhere to all laws related to marketing communications and advertising, as defined by Advertising Standards Council of India.

Powered by an efficient and powerful engine

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EC5, EC7, LA1, LA2, LA4, LA5, LA10, LA14, HR1, HR2, HR4, HR5, HR6, HR7

HR2 – While we do not have a structured program for screening our suppliers for human rights violations, we do have a Human Rights Policy that must be adhered to by all our suppliers.
HR3 – We provide training to all our security regarding aspects of non compliance with environmental laws.
HR4 – There have been no incidents of violations of rights of human rights, including procedures to identify child workers.
HR5 – We provide training to all our security regarding aspects of non compliance with environmental laws.
HR8 – We provide trainings to all our security regarding aspects of non compliance with environmental laws.
HR9 – We provide trainings to all our security regarding aspects of non compliance with environmental laws.
HR10 – We are augmenting our capabilities to monitor other relevant GHG emissions. Other GHG emissions are not reported for 2009-10.
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Caring for the neighbourhood

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At Tata Motors, we continually endeavour to be a sustainable organization and hence stakeholder’s feedback is of prime importance to us. Please send in your valuable feedback to: csmumbai@tatamotors.com

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