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# EFFORTS TOWARDS SUSTAINABLE DEVELOPMENT BY TATA GROUP

#### **Dipak Thakur**

Today sustainable development is the buzzword. Be it corporate sector or B-schools, of late, there has been a realisation that in order to maintain the harmony between three pillars i.e. society, environment & economy, there is a need to have a balance. This balance is achieved by inculcating best practices & processes into the business.

Tata group has always strived for the larger good of the society and community since its inception. Community development has been defined by its core values. Tata group has never believed in what Jamsetji Tata called "patchwork philanthropy".

"The earth provides enough to satisfy every man's needs, but not every man's greed - Mahatma Gandhi"

In subsequent pages, we have tried to put forward the efforts that 3 business units of Tata group have made over the years in order to improve the quality of life of its stakeholders as well as environment. Various measures have been taken by these units in terms of capacity building, resource optimization, reducing their carbon & water footprints and so on and so forth.

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# TATA STEEL

Tata Steel is the 10th largest steel manufacturer worldwide. It operations are in more than 20 countries and has got a commercial presence in over 50 countries.

Tata Steel was established in Jamshedpur-India in the year 1907. In the past few years, Tata Steel has invested in Corus (UK, renamed Tata Steel Europe). Tata Steel has always believed on the principle of mutual benefit between countries, customers, employees and communities which is the most effective path to profitable and sustainable growth.

Tata Steel is among the top five global steel companies with an annual capacity of over 28 million tonnes per annum. Making it the world's most geographically diversified steel manufacturer, operating in 26 countries

The Tata Steel Group, with a turnover of around US \$ 25 billion in FY '2012-2013, and has over 81,000 employees in five continents and is among Fortune 500 company.

It believes that the primary purpose of a business is to improve the quality of life of the people. Tata Steel would volunteer its resources, to the extent it can afford reasonably, to sustain and improve healthy and prosperous environment and to improve the quality of life of the employees and the communities it serves. Tata Steel would conduct business ever mindful of its accountability towards society, abiding applicable. Tata Steel shall impact and influence its partners in fostering a sense of social commitment for their stakeholders- Mr. B. Muthuraman (MD- Tata Steel)

Tata Steel spends around 5-7 per cent of its PAT on several CSR initiatives. The company's development initiatives are spread across three core areas namely the environment, welfare of the employees, and the welfare of community at large. Diverse areas covered under this broad spectrum, which includes environment management, economic development, and community services.

#### **SOCIETY:**

Tata Steels' approach towards business has been derived from the concept that the wealth created must continuously return to the society. The combination of the three elements – social, environmental and economic is very important as per Tata Steel. The combination of these three elements ensures that the business is sustainable for all stakeholders.

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**Organisations for Social Welfare:** To achieve its desired objectives in this concern Tata Steel supports and runs several social-welfare organisations, which includes Tata Steel Rural Development Society (TSRDS), Tribal Cultural Society (TCS), Tata Steel Foundation for Family Initiatives (TSFFI), Indian Red Cross Society and several others. Overall, more than 7 Lakh rural and another 7 Lakh urban population are the beneficiaries of the activities undertaken by Tata Steel.

Initiatives towards rural front include training in agriculture that is provided to villagers through the village development programmes and committees. In association with the Ministry of Non-Conventional Energy and the Confederation of Indian Industry, renewable energy for rural livelihoods is focused upon. Integrated wasteland development programmes have been taken up as also watershed development programmes for rain-fed areas

**Self-Help Groups (SHG's):** The Horticulture Mission programme which has been taken up inpartnership with the Jharkhand Government has already benefited more than a thousand households. More than 500 self-help groups are currently working under various poverty alleviation programmes. Out of this more than 200 are engaged in activities of income generation by micro enterprises. Women's empowermentprogrammes through Self-Help Groups has moved to nearly 700 villages. In order to provide portable water to rural communities 2600 tube wells have been installed for the benefit of over four Lakh people.

**Economic Empowerment:** This is a programme aimed at economic empowerment through improved agriculture is being taken up in three backward tribal areas of Jharkhand, Orissa and Madhya Pradesh. An amount of Rs 100 crore has been earmarked for this purpose and the programme is expected to benefit around 50,000 tribal's living in over 410 villages in these States.

Since its earliest days Tata Steel has taken responsibility for the impact of its activities and has been a pioneer in employee welfare activities, community initiatives and social as well as environment sustainability, just as importantly as it has ensured sound financial management and acted as a trusteeship towards shareholders' wealth.

As a result all the Group companies encourage and promote economic, social and educational development within the communities while giving active support to local initiatives. Over the past several years Tata Steel has continued to concentrate on safety and corporate citizenship with special focus on climate change initiatives.

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#### **Community engagements include the following:**

- Urban Services development and management activities as well as Rural Services and road infrastructure, including the creation of sustainable livelihoods
- Employability training and education
- Facilities for healthcare and services
- Environment protection and preservation of Bio-diversity
- Disaster Management
- Support to NGO's

Tata Steel works in association with the Government, development organisations, local NGOs and the community to ensure sustainable development. CSSD-Corporate Sustainability Services Division delivers these responsibilities that consist of:

# Voluntary initiatives taken by Tata Steel for Sustainability are:

- Reporting on Sustainability and adhering to GRI guidelines
- Affirmative Action based policy implementation
- Adherence to the Tata Code of Conduct
- Management systems followed and managed under SA-8000, ISO-14001, OHSA- 18001 standards
- Corporate Responsibility of Environmental Protection Charter (CREP)
- Reducing Carbon dioxide emissions

#### **Building Community Network**

"Every Company has its responsibility towards the people of that area surrounding the business. The Company should ensure that its doctors, managers are engaged in advising the people of the village and supervise development initiatives undertaken by co-operative effort between organization and the people" - JRD Tata

As a facilitator of growth and sustainable development, Tata Steel Corporate Sustainability Services (CSS) has been taking steps through its operating social-arms that look into the needs of the community. In its functions of operation, capacity building, social and financial value creation has shown initiatives in renewable energy, sustainable livelihood, health, education and affirmative action with the intention of improving the economic and social status of the people. Social-activity groups for this purpose are:

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- Tata Steel Rural Development Society (TSRDS)
- Department Community Development and Social Welfare (CD&SW)
- Tribal Cultural Society (TCS)
- Tata Steel Family Initiative Foundation (TSFIF)
- Urban Services

Years of involvement, either directly or indirectly has made Tata Steel one of the largest non-governmental agencies to be engaged in the community development in the nation. All through it has

- Nurturing and supporting leadership among self-help groups and village advocacy groups.
- Promoting irrigation and multi-cropping, across thousands of acres in over 800 villages in Jharkhand, Orissa and Chhattisgarh.
- Dedicated resources for rural and tribal development, social welfare, and programmes on community empowerment.
- Creating sustainable growth in the villages through encouraged enterprise development.

#### **Economic:**

# **Generation of employment**

Tata Steel makes a remarkable economic impact on society, both direct and indirect, through virtue of the nature of its operations and its extensive social activities. The group realises that its employees are its most valuable asset which play a vital role in building a competitive advantage for Tata's business across the world. Tata Steel has continued to demonstrate that the recruitment of best talent and engagement of its employees is an asset through both high and low demand cycles in the industry.

There has been a significant increase in the percentage of skilled employees and also a simultaneous increase in the workforce as a result of such focused approach. The employees' strength in Indian operations increased to 41,471 as on year end record of 2012. Tata Steel also provides indirect economic benefits to several others including its contractors and suppliers. There are many organisations and institutions in and around Tata Steel including schools, health care services, and society for credit, which are supported by the Company financially and through the contribution of skilled manpower.

In addition to the economic opportunities delivered directly by the business, the organizations activities in and around the areas of its operation have promoted the economic well-being of people through indirect employment and business opportunities. Supporting and associate companies that thrive on the strength of the main industry are also a permanent source of sustainable employment.

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Jamshedpur has one of the highest per capita income and the highest per capita expenditure by consumers in India.

The Tejeswini programme organised by the Company has contributed to the empowerment of more than 1000 women belonging to 80 Self-Help Groups across 45 villages.

The Navjivan Co-operative Ltd, promoted by Tata Steel at Odisha, comprising of over 200 members has generated a turnover of approximately Rs. 60 lakhs last year alone. These members belong to families that have been displaced and are responsible for the NCL's journey, this includes garments, hand painted t-shirts wall hangings, paintings, sarees and others. Fab-India, Tribal Co-operative Marketing Development Federation India Limited. (organisation under the Union Ministry for Tribal Affairs), and Delhi Craft Council are some of the buyers that have shown keen interest to procure products from NCL

#### **Development of Infrastructure**

An essential for economic and social development in any region is availability of adequate infrastructure facilities. Tata Steel has always took the necessary measures in this direction in order to ensure all conveniences in its areas of operation and in the lives of extended communities.

A happy and prosperous workforce and community in and around its operations bears testimony to Tata Steel's manifold corporate sustainability initiatives. It understands that economic development is not just about working with people, there are practical barriers which prevent people from taking up economic opportunities, for instance lack of access to water and power/electricity, poor roads, transport and communications, poor educational health facilities etc. Hence Tata Steel works in collaboration with local partners to identify appropriate areas to develop infrastructure and services that benefit local people and the community at large.

#### Sustainable Livelihood

In the developing and developed nations, demand for unskilled and semi-skilled labour is reducing. Even where agriculture is the primary economic activity, globalisation trends mean that simple subsistence farming becomes less viable additionally social problems evolve from migration caused due to the inability of agriculture to support a large workforce. To address these problems Tata Steel constantly works with local community in rural and urban areas to harness resources and skills that are available to develop opportunities for sustainable livelihoods.

Tata Steel Rural Development Society as a part of its interventions in the areas of sustainable livelihood has focused on improving produce from agriculture. Few major projects initiated towards this direction are:

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- In the first joint project with Agriculture Consultancy and Management Foundation (ACMF) Chennai, initiatives in approximately 20 acres resulted in increased productivity of 2.30 tonnes per acre in the first year of the programme against the target of 2 tonnes per acre.
- A pilot project on dry land farming with International Crop Research Institute for Semi Arid Tropic (ICRISAT)-Hyderabad, developed nearly 22 acres of land resulted in increased yields. Further 2800 acres of wasteland was developed. Second and third cropping in about 3300 acres of land was facilitated through 65 water-harvesting structures.
- A land and water management programme has been initiated in Orissa. During the first phase of the programme, in the year 2008 and 2009, TSRDS took up the job of reviving around 30 non functional lift irrigation systems of which more than 20 were completed by end of 2009, covering over 700 acres of land benefitting 1500 families.
- Another 9000 acres of land has been brought under cashew and mango plantation, benefitting more than 3500 households from 130 villages in districts of Jharkhand.
- In order to encourage resource building and skill development, community based organisations, such as village development committees, watershed committees and users groups are formed to build a sense of ownership among the village community.
- At a mine in Orissa, Tata Steel has also introduced a scientific rainwater harvesting system to check the depleting ground water levels. A large storageand percolation lake is constructed at a favourable location to pool in the water from the vast catchment area around the lake..
- Around 1600 youth have undergone skills training by in house resources as well as by professional bodies.

#### **Income Regeneration**

- Formation of Self Help Groups.
- Arranging for credit for self-employment ventures.

Encouraging micro enterprises like carpet weaving, terra-cotta, making of mats, food processing, poultry farming, mushroom farming, pisci-culture and floriculture

Tata Steel's has contributed immensely towards local community infrastructure development and services, below are two such examples.

# **Development around Jamshedpur**

Though almost eighty percent of local residents of Jamshedpur are not employees of Tata Steel, they are taken to be vital stakeholders in the Company and equally entitled to the continuing social, economic and environmental welfare. Strong community infrastructure to support the healthy operation of the business is ensured by Tata Steel. Few initiatives in this direction are:

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- Jamshedpur Utilities and Services Company (JUSCO) were set up to provide committed municipal services to the Jamshedpur township that boast of having the highest reliability in water and power services.
- Roads and infrastructure improvement and maintenance including beautification through parks and horticulture gardens.
- Tata Steel runs 3 primary schools, 6 high schools, a college in the region apart from supporting more than 500 other schools.
- The 900 bedded Tata Main Hospital provides quality health services to employees and citizens of Jamshedpur
- 2 super dispensaries and 9 dispensaries along with HIV/AIDS support centres.
- The JRD Tata sports complex and a stadium for cricket.

# **Community infrastructure-Orissa**

Tata Steel is developing new operations in Orissa; it has worked with local communities to create many such needed facilities. Some initiatives include are

- Installation of several tube wells in 2008-09 to provide drinking water.
- Irrigation facilities to villages nearby villages, enabling the farmers to achieve harvests 3 times a year.
- A bridge was built at Mutuda village to enable access all year round.
- Drainage system at adjoining villages has been improved.

# **Townships Resettlement**

Since the early stages of a project planning, Tata Steel (Tata Steel's Resettlement and Rehabilitation programme) engages with local communities to discuss their expectations and needs. Trijanga Township is one such development, which is well equipped with amenities like all weather roads, piped water, uninterrupted power supply and a planned layout. Established by the Tata Steel Trijanga, Gobarghati and Sansailo Townships was built for families displaced by the Kalinganagar Greenfield steel manufacturing project. Each relocated family has been given a plot of land and considerable funding for the hose construction. They have also been given employment.

#### **Other Infrastructure Initiatives**

#### **Health Facilities**

- Medical services are extended through a 66 bedded Tata Steel Hospital at Noamundi (outside Jamsedhpur), with ultra-modern ICU and a 47 bedded hospital at Joda.
- HIV/AIDS support centre
- Resource centre (TSFIF), which has the goal of improving reproductive health through integrated capacity building and development programmes

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#### **Environment**

#### **Initiatives on Environment Conservation**

The ever growing need for energy of the world can only be attained through its conservation, which in turn needs adoption of innovative, new and efficient technology, new ways of operating and modernisation of equipment. The responsibility of managing environmental impact goes beyond operations. In light to this Tata Steel has always adopted effective measures in improving its processes, investing in breakthrough technology and developed products and services that minimise adverse consequences in the environmental performance of the product-cycle.

# Five areas of environment management that Tata Steel has over the years focused on:

- Natural resources optimization to their fullest extent
- Water conservation and management
- Utilisation of waste and conservation of energy
- Reduce CO2 emission in order to control pollution
- Afforestation

### **Combating Climate Change**

India currently had no Green House Gas (GHG) emission reduction targets, as per the first Kyoto commitment period up to year 2012. However, as part of UNFCCC, India has taken the initiative to participate in Clean Development Mechanism (CDM) under the Kyoto Protocol, this has opened up new opportunities for achieving revenue from carbon trading and Tata Steel is pursuing these opportunities extensively. The Company has registered its first CDM Project at the UNFCCC for TRT at G Blast Furnace. Tata Steel is also actively pursuing other programmes to combat climate change. The steel industry as a sector contributes to 4% of the total man made carbon dioxide emissions throughout the globe. Reducing greenhouse gas emissions and help and educate customers to do the same has become Tata Steels commitment. The strategic priorities in concern to climate change objective are as below

- In line with present technology, reduce emissions in the short to medium term
- Invest in the R&D of longer term breakthrough technologies
- Utilization of new products/services that would reduce CO2
- 'Leading by example' throughout global steel industry

Contributing to this effort, the Climate Task Force (CCTF) also laid down a continuous plan of investing in breakthrough technologies to reduce the carbon footprint by around 20% in the next 8-

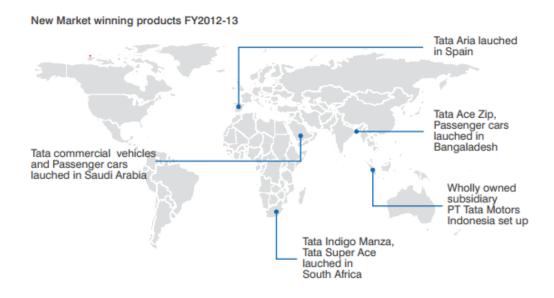
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10 years. It has incorporated in its operations technologies like ULCOS (Ultra-low CO2 making of steel), which is aimed at reducing emissions in the process cycle.

- TSRDS has been imminent in the protection of more than 2000 hectares of regenerated forests
- A large manmade reservoir (Dimna Lake) promotes rainwater harvesting
- The Zoological Park in Jamshedpur developed by Tata and several other Botanical Parks in other locations

# **TATA MOTORS**

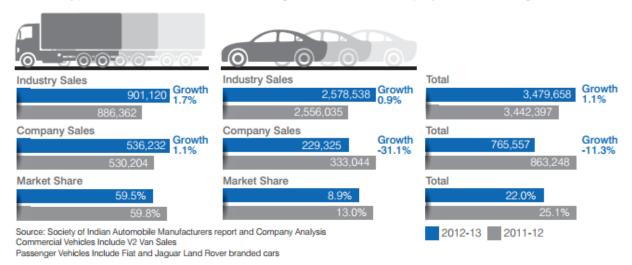
- India's Largest automobile company
- Leader in commercial vehicle segment
- 4<sup>th</sup> Largest truck & bus manufacturer globally
- 62,000 employees
- Operations spread across Asia, Europe, Africa & South America

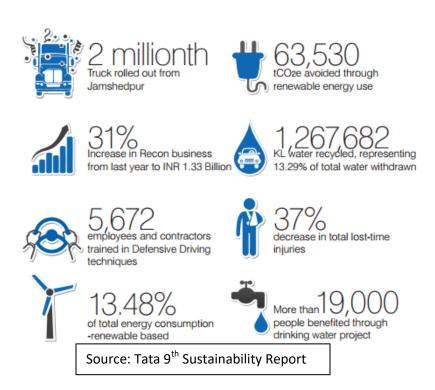


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#### Performance snapshot:

The industry performance in the domestic market during FY 2012-13 and the Company's market share is given below:-





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#### "Concern For Environment"

- Tata Motors celebrated Earth Hour on 23<sup>rd</sup> March 2013.
- <u>Earth Hour Concert</u>: Tata Motors organized Earth hour concert in Ahmedabad in association with an NGO and WWF India. The main focus of this concert was to create awareness about low carbon lifestyle. The entire concert was performed in candlelight.
- Biogas Plant at company's pune plant has been set up. The plant can process upto 6 tonnes of organic waste/day.
- Wind energy being utilized at Pune, Sanand& Dharwad plant, whereas at Lucknow plant, solar energy is being harnessed.
- In lieu of wind energy project at Tata's Pune plant, 24,243 CERs were issued which were equivalent to 0.71 million INR.

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# **Renewable Energy Effects:**

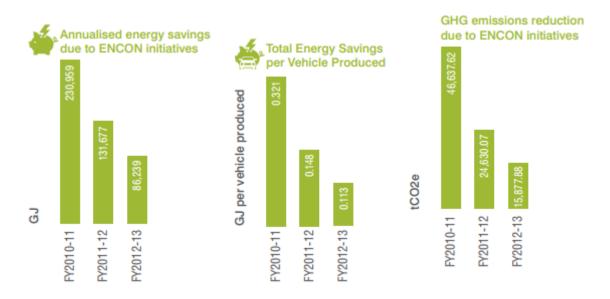


# **Energy Conservation Initiatives (ENCON Initiatives)**

- Installation of waste heat recovery for paint baking oven.
- Improvement in burning efficiency of burners by controlling the air fuel ratio with the help of flue gas analysis.
- Conversion of electrical heating into Natural Gas and LPG based heating systems for water heaters and Endogas generators respectively.

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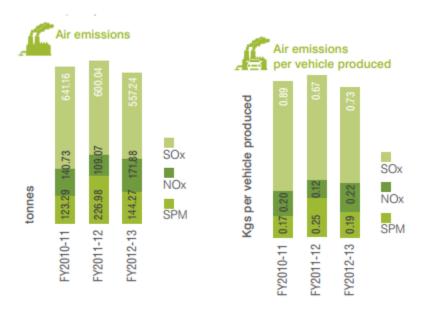
- Installation of Variable Frequency Drives for various applications like Blower's and Pump's Motors.
- Installation of CFL, LED bus bar indicators and LED street lights, Use of 54Wx4 T5 lamps for high bay lights.
- Installation of energy savers in lighting circuits.
- Installation of Light pipes and Transparent Polycarbonate sheets.
- Installation of Solar water heating systems
- Optimization of AC plant operations and removal of unwanted AC systems.
- Use of Wind Ventilators, downsizing of motors, trimming of impeller of oversized water recirculation pump.
- Installation of Biogas plant for canteen waste and generation of electrical energy from biogas. (Source: Tata 9<sup>th</sup> Sustainability Report)



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# **Air Emissions:**

- R134a is used as refrigerant which has zero ozone depleting potential.
- 91.85 kg of CFC-11 used by- Pune, Sanand& Jamshedpur plant



- Tata motors voluntarily registered its Pimprichinchwad plant in Pune for ICBC Green Fcatory Ratings System. The same plant in 2010 received IGBC Gold rating.
- In July 2012, Dharwad plant received IGBC Platinum rating.
- Pantnagar plant's administrative building received IGBC Gold rating in December 2012.
- Tata Motor's manufacturing plants have been certified with ISO 14001:2004- Environmental Management System Standard.

<sup>&</sup>quot;Material Management i.e. less resource usage through innovation & optimization"

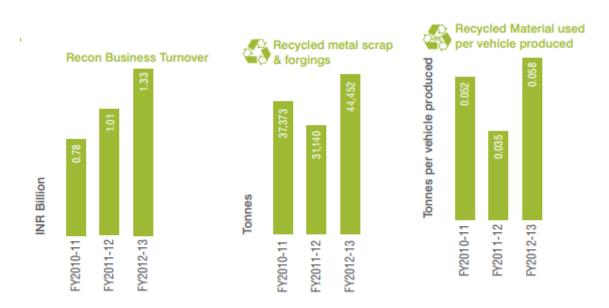
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Material consumed	Units	FY 2010-11	FY 2011-12	FY 2012-13
Steel	Tonnes	220,133	258,980	135,873
Steel Tubes	Tonnes	82	43	19
Non-Ferrous Alloys	Tonnes	5,040	5,181	3,577
Ferrous Alloys	Tonnes	1,716	3,097	733
Steel Melting Scrap	Tonnes	62,195	95,993	68,422
Paints, Oils & Lubricants	Tonnes	12,151	14,457	10,840
	Kilo Liters	13,349	16,717	12,455
Tyres, tubes & flaps	Numbers	7,243,420	8,497,702	5,282,763
Engines	Numbers	135,181	152,785	100,737
Sand	Tonnes	75,036	78,522	52,634



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# **Reconditioning & Recycling (RECON)**



# **Waste Management:**

- Paint sludge- One of the hazardous waste in automobile industry, has been diverted towards cement industry
- In 2012-13, 124.94 MT of it was converted into primer.
- Incineration ash is being used to manufacture pavement bricks at Jamshedpur plant.
- Tie up with ACC cements & Ambuja Cement to re-process plastic waste
- Conversion of organic waste in manure in Jamshedpur & Lucknow plant.

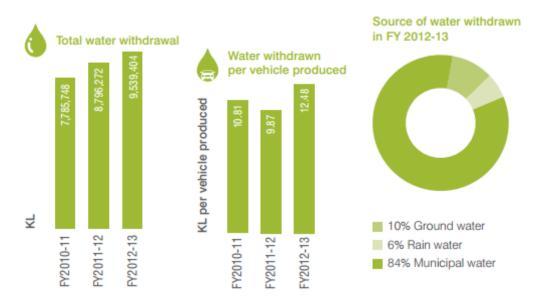
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Hazardous waste disposed	FY 2010-11	FY 2011-12	FY 2012-13
Sludge <sup>16</sup> (tonnes)	4,812.81	5,763.35	5,281.62
Used Batteries (tonnes)	198.19	164.44	187.59
Used oil (tonnes) <sup>17</sup>	497.68	510.36	212.67
Oil contaminated materials (tonnes)18	55.31	230.49	155.75
Other hazardous waste (tonnes)19	936.65	1,495.33	2,296.76
Other hazardous waste (KL)20	231.90	441.07	739.80

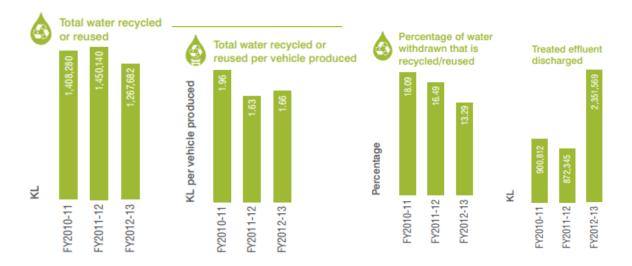
Non-Hazardous waste disposed	FY 2010-11	FY 2011-12	FY 2012-13
Plastic waste (tonnes)	214.82	246.44	284.19
Metallic scrap (tonnes)	12,160.92	25,601.96	37,991.19
Other non-hazardous waste (tonnes)21	71,685.17	99,128.31	50,902.75

# **Water Management**:

- Water being one of the scarce resources, therefore water conservation has always been one of the top most concerns for the Tata motors.
- Tata motors have ensured that its water footprint remains low through water recycling & reuse system.
- Rainwater harvesting has been implemented in all the plants.



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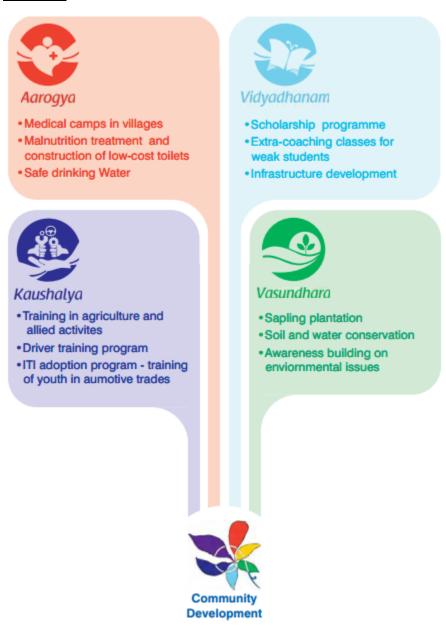


#### **Bio-Diversity Management:**

- Jamshedpur, Pune, Pantnagar plants are located in notified industrial zones, thus posing minimal threat to the biodiversity.
- Pune unit's achievement- 4 ponds, 2 lakes & planting trees in 245 acres of land
- To create idle nesting spot for birds, swamps have been developed alongside the water bodies
- None of its plants fall within 10KM range of any biodiversity zone.

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#### **Inclusion**



Arogya: Public health system is not in good shape in India. In most of the government hospitals, situation is more or less the same. The regions in which Tata Motors has its plants are considered to be not so developed such as Jharkhand. The healthcare system there is in poor health and therefore the people living around Tata plants have had to suffer because of lack of proper healthcare facilities. Under this initiative, Tata motors provide curative and preventive medical facilities in communities with special focus on maternal and child health care. Tata motors has established a

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state-of-art 16 bedded Malnutrition Treatment Centre (MTC), in partnership with UNICEF Jharkhand which has saved lives of over 400 children till now.

#### Arogya

Key Arogya initiatives	Outreach 2012-13
Health care services provided to commun	nity 84,243
Health check-ups in schools	2,595
Health awareness programs	10,214
Sanitation drive	3,500
Safe drinking water	19,091
Malnutrition prevention	317
Eye-camp program	2,758
Survey for leprosy detection	165,000
Total population covered	287,718

<u>Vidyadhanam:</u> An education initiative by the Tata Motors unit of the Tata Group, to bring change in the life of rural students through holistic approach. It includes:

- Scholarship for meritorious students
- Coaching classes for weak students
- Improving schools by providing furniture's, establishing library etc.
- Including training programmes like skill development, computer training etc.

Key Vidyadhanam initiatives	Outreach 2012-13
Infrastructure and facility up-gradation	15,597
Teacher training	374
Co-curricular activities	6,276
Scholarships	971
Career counselling and coaching classe	es 1,422
Total population covered	24,640

**<u>Kaushalya:</u>** Tata motors has partnered with a lot of industrial training institutes in order to bring them at par with world standards by improving their facilities. Tata motors has also started to train the trainer to improve the level of ITIs.

Key Kaushalya initiatives	Outreach 2012-13
Technical and vocational training	5,667
Livelihood opportunity for rural women	912
Land levelling and development / creation of irrigation structures	3,809
Training & support of entrepreneurs	2,139
Total population covered	12,527

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Key Vasundhara initiatives	Outreach 2012-13
Number of trees planted	233,760
Conservation of natural resources - soil a water conservation	and 15
Population benefited through rain water harvesting structures	8,060
No. people sensitized on environment is:	sues 16,660
Total population covered	24,720

# **Affirmative Action Program- Towards Inclusive Growth**

Tata Motor's affirmative Action plan has 4Es as components:

- Education: 537 scholarships were given to SC/STs in 2012-13
- Employment: 28 vendors in company's vendor park were tracked. It was found that out of total direct employment of 3464, people belonging to SC/STs were 975.
- Employability: Involves company's initiative in training people

Year	Blue Collar Trades	Soft Skill Training (new activity)	Improved Agricultural Practices	Allied Agricultural Activities	Service Sector	Total
2011 -12	489	0	520	435	625	2,069
2012 -13	574	302	295	1,198	986	3,355

• Entrepreneurship: Partnered DICCI (Dalit Indian Chamber of Commerce & Industry) to identify SC/STs vendors. In 2012-13 alone 4 SC/ST vendors have been brought under its supply chain fold and business worth INR 13.07 million has been extended.



#### **Organization Profile:**

As part of Tata Group, TCS (Tata Consultancy Services) which is an IT Service, Business Solution and outsourcing company founded in 1968. Its head quarter is in Mumbai, Maharashtra, India. TCS is a public limited company listed on Bombay Stock Exchange and National Stock Exchange. TCS delivers it services to global business firms, it offers complete and integrated IT-enabled services and portfolio of IT with the help of its unique GNDM i.e. Global Network Delivery Model. TCS is a benchmark for the Indian IT industry.

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In the Fiscal year 2013 11.57 billion of consolidated revenue is reported by TCS. Key industry vertical service by TCS is as follows:

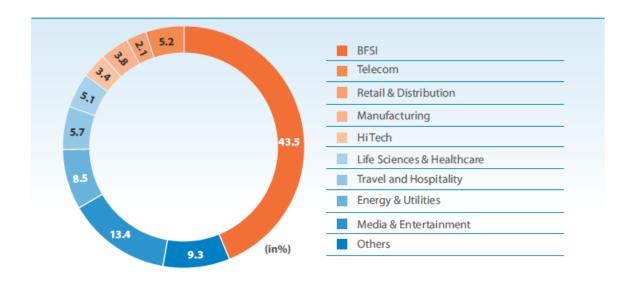


Figure 1: Revenue break-up by industry vertical

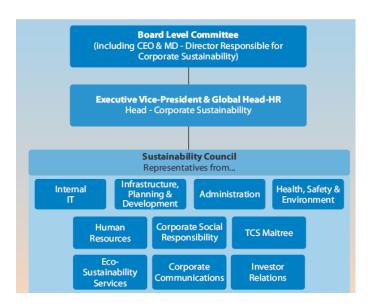
**Global Foot Print:** TCS is expanding its business globally. Total number of offices TCS has as of 31<sup>st</sup> March 2013 is as follows:

- USA and Canada 22 offices
- Latin America 14 offices
- UK and Ireland 31 offices
- Europe 21 offices
- Asia Pacific 19 offices
- 8 countries of Middle East and Africa 9 offices
- India 83 offices

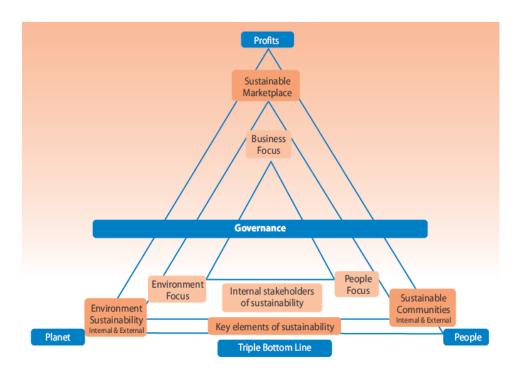
TCS GNDM i.e. Global Delivery Network Model is consists of 124 delivery supporting network in total 21 countries which helps them to deliver their service easily all over the world.

**The Sustainability Council:** They are having sustainability council members from different levels and department which take cares of the sustainability initiatives.

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**Sustainability Approach:** Tata Consultancy Services adopted the same philosophy uses by Tata Group's to building up the sustainable businesses which helps them to take care of community, and Environments. Tata Consultancy service using the TBL i.e. Triple bottom line approach and found that the People, Planet, and Profit are 3 important pillars of Corporate Sustainability.



People: Sustainable External and Internal Communities: Corporate Social Responsibilty

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Tata Consultancy Services backbones are there 250,000 employees. All of them are actively participating in the sustainability initiatives. Tata Consultancy Service is doing the CSR activities in the following areas and they are as follows:

# 1. Health and Safety

- TCS had given an integrated **HMS** (Hospital Management System) with IT infrastructure free of cost to Cancer Institute in Chennai.
- They had added more features like Bar Code Printing, and Cancer Registry system to HMS, so that the detail of the Cancer registry goes to Cancer Institute of Chennai.
- TCS is having its own medical center named **Tata Medical Center** and they implemented its Hospital Management System in this center worth Rs 4.2 Crore.
- TCS has developed **NRDR system** (National Retina Disease Registry) free of cost for Retina India Foundation (NGO).
- They had also developed **Case Management System** for NGO to register the case regarding trafficking.
- In the Year'13 TCS conducted a survey during the visit in Gowhati center and prepared **Patient** Care System to tracking the number of patients.
- Impact India Foundation is an NGO which is strongly focusing on reducing the number of disabilities among population ,with the help treatment so TCS had developed a system called **Donor Management System** which helps them to locate the donor's.

# 2. Education and Skill building

- Adult Literacy Programme (ALP): This was the first social cause started by TCS during 2000, and from that time are doing very well in the programme. TCS reached total around 200000 beneficiaries since 2000. In the year 2013, TCS helped in making more than 11,000 people across India through this programme. They also had tied with several Non Governing Organizations to reach more people and they are having total 463 trainers. They had implemented the software in Jails of Lucknow and Delhi and a total of 300 prisoners have been made literate with the help of this software and programme.
- Academic/Institutional Collaboration: Now TCS has started to collaborate with the institutions and implemented the ALP programme with the help of Academic Interface Programme-(AIP). This initiative was started in Andhra Pradesh and they had successfully implemented the ALP software in the rural areas. They had collaborated with nearly 6 engineering colleges and nearly 700 students volunteering the ALP programme in several rural areas.

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• Education-Others: Some Industries of India and Government of India's NSDC (National Skill Development Corporation) is working on project "UDAAN" in which they helps the Kashmiri population to develop their skills and work with Indian companies. TCS has partnered with NSDC to work on this project. TCS developed 14<sup>th</sup> week training programme. In the Financial Year of 2013 they had completed 2 batches. They are having "Advanced Computer Training Center" developed in 2008 by TCS and till now they had trained total 117 peoples with visual impairments and from that they had hired 70 peoples in their organization. In the Financial Year of 2013 they had trained total 18 peoples with visual impairment. They are running "Women Empowerment Programme" in the various villages and total 570 children in the villages got benefitted by TCS for providing the clean drinking water at the primary school.

# Planet: Environmental Sustainability:

As a part of Tata Consultancy Service culture of being a responsible corporate citizen, they are continuously working so that their partners of supply chain in disposal activities and green procurement should be engaged with TCS. So to achieve this TCS takes an initiative to reduce the consumption of energy, to reduce the use of water and natural resources and to reduce the emission of carbon footprint. All the TCS IT infrastructure and offices are designed and built sustainable for the efficiency of maximum resources. They are working to reduce the environmental impact on the planet because of the company.

#### **Carbon Emission:**

In the Fiscal year of 2013 total fuel consumed by the TCS owned vehicles was around 157,362 liters of diesel and around 109,000 liters of petrol, and fuel consumed by diesel generators was more than 600000 liters. Below are the sources from where Green House Gas emissions contribute to TCS's carbon footprint:

- Scope 1: Company-owned vehicles, Diesel-run Generator sets, Refrigerant gases (fugitive) emissions, fuel combustion for space heating and cooking gas combustion
- Scope 2: Electricity bought from Government or Private Company.
- Scope 3: Mobile fuel combustion in company hired vehicles and Business Air Travel.

# Achievements of TCS in reducing Carbon Footprint:

- They had successfully reduced the carbon footprint.
- Scope 1 + Scope 2 GHG emissions was 1.99 in the year 2013 in comparison to 2.12 in the previous year.

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- From the Fiscal year 2008 they are successfully reduces the 34% of carbon footprint (Scope 1 and Scope 2).
- They are having the target of reducing the scope 2 by 50% till 2020.
- Instead of travelling they had used audio and video calling for the meetings they are able to reduce 58% of carbon emissions from Scope 3.

#### **Water Performance:**

TCS sources of fresh water are from Tanker Supply, Municipal Supply, Bore-wells, and Packaged Drinking water. In 2013 total liters of water consumed was 2.33 million KL. Some of the steps taken to reduce fresh water consumption include:

- Dual flushing system in toilets
- Taps with variable output and sensors
- Drip irrigation system
- Optimization of water flow rates through faucets
- Regular maintenance of water pumps
- Sewage treatment plants where feasible; treated sewage water for A/C cooling tower make-up, toilet flushing and gardening
- Employee actions on water conservation through engagement and awareness
- **Sewage Treatment and Reuse:** Many TCS offices are having sewage treatment plants (STP). They used recycled water for the HVAC cooling, gardening, and toilet flushing. TCS's recycled water treatment has increased from 526,729 kL to 610,577 kL in the fiscal year of 2013.
- Rain Water Harvesting: In order to reduce the consumption of fresh water many TCS offices are having the rain harvesting system. They had successfully achieved the 10% increase in the rain harvesting; now the current potential is 32% of the total ground water consumed by TCS.

#### **Waste Management:**

In this they had reduces the various wastes emissions generated by TCS operations and what steps they had taken to reduce the impact on environment. As their nature if business is IT, that's why their waste is very limited and primarily restricted to MSW i.e. Municipal Solid Waste. Other waste by TCS company are E-waste, waste lube-oil, lead acid batteries and etc. Steps taken by TCS regarding their waste management are as follows:

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- Waste lube oil, UPS batteries, waste disposed through government authorized recyclers with compliance with local regulations
- Waste paper Sent for recycling
- Printer toner cartridges Sent back to the manufacturer under product take-back arrangement
- Bio-degradable garden waste Vermicomposting
- Bio degradable food waste and Generation of biogas/composting or sent to piggeries as feed
- Other mixed dry waste Sent to scrap dealers or municipal disposal

**Biodegradable Waste:** All the wet and dry waste which is generated by the canteens and TCS offices is properly recorded and monitored by the management. In the Fiscal year of 2013 15% of waste was treated with the help of bio-digester treatment and gas generated by bio-digester is used in the kitchen. Many TCS offices places like Trivandrum, Pune and Mumbai are having installed bio-digester. In the Fiscal year of 2013 37 tonnes of Vermicomposting generated from the garden waste is used as fertilizer within TCS campuses.

**Paper Management Initiative:** TCS has been successfully achieved to reduce the paper consumption by 16% over the last year and 76% from the year 2008. In Fiscal Year 2013, 89% of waste paper was sent for recycling.

**E-Waste Management-** Total 10917 numbers of computers which was waste were disposed through authorized recyclers in the fiscal year 2013 and other computers which was in working condition but not in use was donated to charitable trust.

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# **Environmental Targets and Performance**

Our FY 2013 performance against our long term environmental targets is as given below:

Environmental Parameter	Target	Timeline	Performance level	Status
Scope 2 Carbon emissions	Achieving 50% reduction in per capita Scope 2 emissions over baseline year 2007-08	2020	Achieved 40% reduction	On track
Water management	Target reduction of fresh water consumption by 20% over baseline year 2007-08 (per capita)	2015	Achieved 13% reduction	On track
	To become ground water neutral	2015	32% groundwater neutral	On track
	Make all our new and existing TCS-owned campuses as 'zero water discharge' by treatment & recycling	2015	All new campuses zero discharge; existing campuses under review	On track
Solid waste management	Zero* waste to landfill (*Zero - <5%)	2015	89% paper recycling 15% wet waste recycled	On track
	100% Compliance to waste management legislations	Ongoing	100% compliance for regulated wastes	100% Compliant
Associate Awareness	One awareness communication per quarter & One campaigns per year	2012	Achieved	Achieved

(Source: Tata Consultancy Service Corporate Sustainability Report 2013)

# TCS' Eco-Sustainability Solutions

TCS has built up a dedicated unit for Eco Sustainability with a an objective of finding and developing solutions which would help the clients drive their sustainability initiatives effectively and efficiently. TCS provides the following solutions:

1) **Management of Sustainability Performance:** Defining systems and processes to optimally manage sustainability performance of companies

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- 2) Compliance Management-EHS: Defining systems and processes and to optimally manage compliance requirements of companies
- 3) **Energy Management-** Integrated energy management throughout the entire energy management lifecycle i.e. metering, diagnostics, implementation of energy, monitoring, reporting, tracking and verification
- 4) **Sustainability Management of suppliers:** Designing and implementing systems to manage supplier sustainability information to create visibility in driving product stewardship
- 5) **Product Sustainability:** Assessments of lifecycle and product engineering