



Environmental Disclosures Under GRI Reporting

Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. 'Sustainability reporting' is a broad term considered synonymous with others used to describe reporting on economic, environmental, and social impacts

The Global Reporting Initiative (known as GRI) is an international independent standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption. GRI framework is a widely used standard for sustainability reporting and disclosure, in order to enable businesses, governments, civil society and citizens to make better decisions based on information that matters. GRI framework includes standards guidelines for different sustainability aspects like energy, water, corruption, labor, safety etc.

The environmental dimension of sustainability reporting concerns an organization's footprints on ecosystems, land, air, and water. The GRI Aspects in the Environment Indicator set are structured to reflect the inputs, outputs, and impacts an organization has on the environment. Energy, water, and materials are three standard

types of inputs for most organizations. These inputs result in outputs of environmental significance, which are captured under the aspects of Emissions, Effluents, and Waste. Biodiversity is also related to the concept of inputs in that it can be viewed as a natural resource. However, biodiversity is also directly impacted by outputs such as pollutants. The Aspects of Transport and Products and Services represent areas in which an organization can further impact the environment, but often through other parties such as customers or suppliers. The Aspects of Compliance and Overall cover specific measures the organization takes to manage environmental performance.

As a responsible business unit it's our duty to disclose our non-financial performance to stakeholders. At MSSSPL we use the GRI standard disclosure framework to report on various aspects like Material, Energy, Water, Emissions, Effluents and Waste and to communicate our sustainability strategy, performance and future plans to our stakeholders.

Source: <https://www.globalreporting.org/information/g4/G3andG3-1/guidelines-online/G31Online/StandardDisclosures/Environmental/Pages/default.aspx>
<https://www.globalreporting.org/Information/about-gri/Pages/default.aspx>

-Ms. Sunetra Rane
Business Excellence Cell

Environmental Audit At MSSSPL

The moment we hear the word "Audit" we think compliance! But it is more than just compliance.

Environmental Audit is a general term that can reflect various types of evaluations intended to identify environmental adherence of a company to the Environment Management System. It is an important tool as it provides performance evaluation of industrial working facilities and its possible effects on the surrounding community. The audit also monitors the scale of optimum utilization of the resources and alerts the employees to take corrective and preventive actions.

At MSSSPL various internal and external environment related audits are conducted with an objective to (a) minimize negative effects on the environment; b) ensure that the company is in line with applicable laws, regulations and other environmental requirements; and (c) continually improve the above.

We were recently certified as per the revised standard of ISO 14001:2015. We are also ISO 50001 Energy Management System certified. These certifications are awarded after stringent yearly audits by experts from approved agencies. Additionally we face monthly environment monitoring by MOEF (Ministry of Environment & Forests) Authorized Environment lab which is an external governing body. To ensure that we are prepared for above external audits we carry out internal audits and prepare

an Annual Environment Statement. Bio Medical Waste audit is conducted and reported to MPCB (Maharashtra Pollution Control Board) as per their guidelines. Additionally, our certified internal auditors carry out internal audits twice a year that cover aspect and impact document assessments, review of shop floor to identify any abnormality affecting the environment, hazardous waste management, and adherence to other requirements as per the standards. The Observations/Non Conformities are addressed by respective HODs (Head of Department)/SHs (Sectional Head) and EHS (Environment, Health and Safety) coordinators.

Other than the above audits critical environmental parameters are assessed under TMW (The Mahindra Way) and Sustainability initiatives. Overall environment performance is reviewed by Top Management in the Management Review Meeting conducted twice a year.

Environment audit enables the company to demonstrate adherence to the commitment to its stakeholders through effective environmental protection

-Mr. Niranjan Purandare
Business Excellence Cell



Hazardous Waste Handling & Storage



Hazardous waste is a waste that is dangerous or potentially harmful to our health or the environment. Hazardous wastes can be liquids, solids, gases, or sludge. They can be discarded commercial products like cleaning fluids or pesticides, or the by-products of manufacturing processes. During the past five decades, significant quantities of hazardous wastes have been released into the environment due to poor management of these wastes or failures of treatment facilities.

In order to safeguard our environment for future generations, it becomes important to regulate and manage hazardous wastes in a manner that is ecologically and socially sound, as well as economically viable and sustainable. However, sustainable management of hazardous wastes is full of challenges mainly because of the complicity and uniqueness associated with hazardous wastes. Wastes that are released in the air as emanations naturally are regulated on site, as per legal requirements. The situation is more complex with hazardous wastes because total storage, disposal of or utilization of these solid wastes is not feasible within the premises on a long run. Such wastes need special collection, treatment, and recycle.

Moreover, the entire society is called upon to be responsible for the sustainable management of hazardous wastes. To this end, sustainable management of hazardous wastes calls for the reduction of the impacts of hazardous wastes on human health and the environment; it promotes a paradigm shift in emphasis from remedial measures to preventive measures such as reduction at source, reuse, recycling and recovery.

The underlying driver of direct human impacts on the environment is human consumption. This impact is reduced by not only consuming less but by also making the full cycle of production, use and disposal more sustainable. Consumption of goods can be analysed and managed at all scales through the chain of consumption, starting with the effects of individual lifestyle choices and spending patterns, through to the resource demands of specific goods and services, the impacts of economic sectors, through national economies to the global economy. Analysis of consumption patterns relates resource use to the environmental, social and economic impacts at the scale or context under investigation. The ideas of embodied resource use (the total resources needed to pro-

duce a product or service), resource intensity, and resource productivity are important tools for understanding the impacts of consumption.

In order to protect the environment we have taken many steps to manage the impacts at MSSSPL

- Ensuring optimum use of material & inventory control.
- Material issue against replacement
- Training & Awareness on hazardous waste management.
- Implement waste segregation and handling across the plant.
- Distribution of colour coded storage bin for category wise waste storage in the plant.
- Collection & storage of hazardous waste at central hazardous waste storage.
- Maintain good housekeeping and maintenance of the storage.
- Disposal of the hazardous waste through authorized vendor approved by MPCB (Maharashtra Pollution Control Board) /CPCB (Central Pollution Control Board) as per norms.
- Develop central waste storage for non-hazardous waste & disposal from single point.
- Disposal of non – hazardous waste on day to day basis for recycling.
- Increase in the recycling of Mill scale, Mag. Car. Bricks (Magnesia Carbon Bricks) /BP refractory (Bottom pouring refractory) Ladle refractory, Black refractory, Ladle plate & Nozzle.
- Establish slag recycling plant under guidelines of top management.
- Compliance of legal & statutory requirement.



Reuse is one main strategy for waste reduction.

***-Mr. Tejas Thandar
Stores Department***



Quiz

(Be the first one to SMS the answer @ 7722029050 & get a prize for the same)

Which one of the following is a useful biological indicator of Sulphur-dioxide pollution ?

- [A] Bryophytes
- [B] Algal blooms
- [C] Pseudomonas
- [D] Lichens

Carbon Footprint Of MSSSPL

Global climate change is matter of concern for whole world. **The main effect of increased greenhouse gas emissions is global warming. Carbon dioxide, methane, nitrous oxide and fluorinated gases all help trap heat in the Earth's atmosphere as a part of the greenhouse effect.** However, human activities, primarily the burning of fossil fuels and deforestation, have intensified the greenhouse effect, causing global warming.



Different types of emissions are

1)Direct Emissions (Scope I) :

- Process Emissions
- Stationery Combustion
- Mobile Combustion
- Fugitive Emission

2)Indirect Emissions (Scope II)

3)Other Emissions (Scope III)

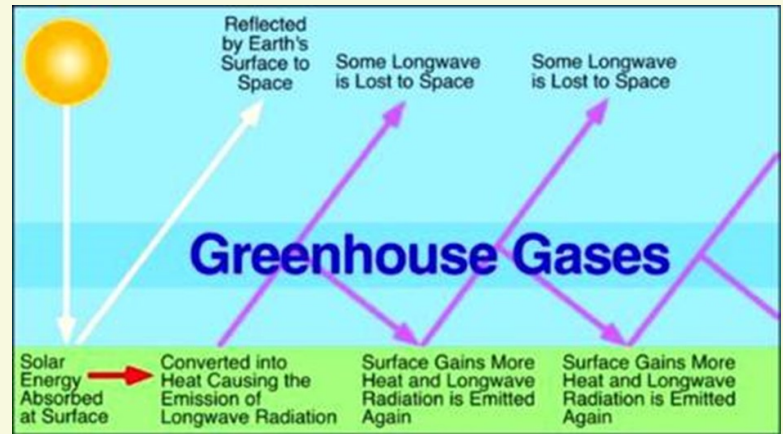
Scope I are also referred to as Direct GHG, and are defined as 'emissions from sources that are owned or controlled by the organization'

Scope II are also referred to as Energy Indirect GHG, and are defined as 'emissions from the consumption of purchased electricity, steam, or other sources of energy (e.g. chilled water) generated upstream from the organization'.

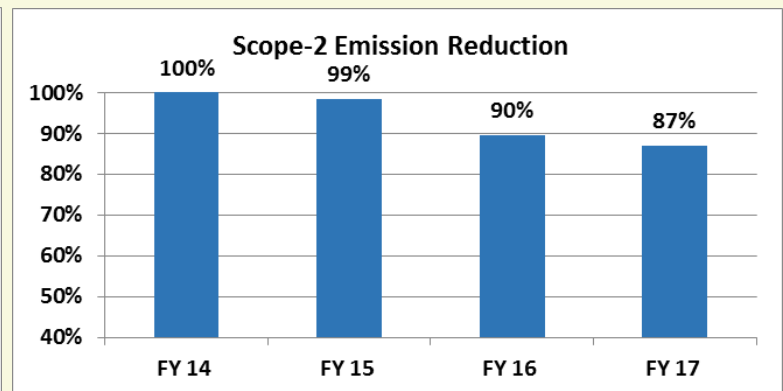
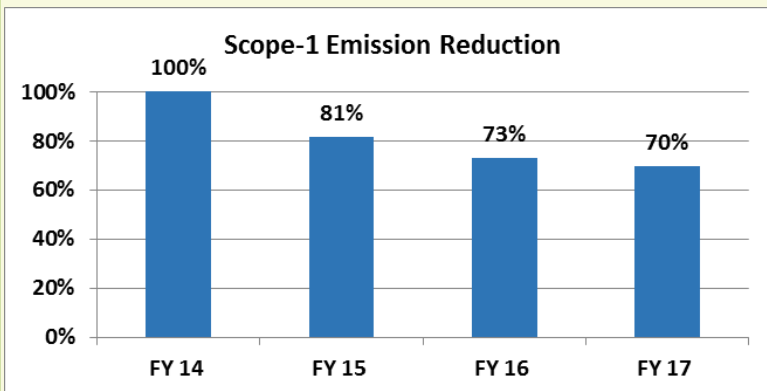
Scope III are also referred to as Other Indirect GHG, and are defined as 'emissions that are a consequence of the operations of an organization, but are not directly owned or controlled by the organization' eg Employee Commuting, Business Travel etc

The Emission from fuel that we burn directly within the Plant comes under Scope-1 GHG emission. The electricity that we consume is calculated in emission and consider in Scope-2 GHG emission.

MSSSPL has set an ambitious goal of achieving 35% reduction in Scope-1 GHG Emission & 40% reduction in Scope-2 GHG emission by 2022 from base line of F 13. We have prepared a road map for Electricity, Oil & Renewable Energy to achieve the GHG reduction target. We are looking forward to use natural gas technology for all primary and secondary furnace in our plant by FY 19. Natural gas is clean source which will reduce our GHG emission in atmosphere. Sourcing renewable energy helps to minimize the GHG emission. We have already started procurement of Renewable Energy from Grid. In FY 17 total Renewable Energy purchased from Grid is 7 % of our total electricity consumption and it has been expected to increase in coming financial year. We have plans to install 4 MWh roof top , ground solar system & waste heat recovery projects for power generation & energy saving, which helps to achieve reduction in GHG emissions.



MSSSPL journey so far towards reduction in GHG emission



**-Mr. Satyajeet Kumar
Electrical Department**

Sustainability At Home

Sustainable living means practising a lifestyle that uses as few of Earth’s natural resources as possible, in an attempt to create the least amount of environmental damage for future generations. ***Sustainable living isn’t just a buzzword or a phase, it’s a continuing way of life, and one that is important if we are want to preserve the environment for our grandchildren and their grandchildren. If we continue to use all of our natural resources at the rate we are currently, and continue to cause ongoing damage to the environment from unsustainable practices, we are putting future generations in a situation where they will not have enough resources available to sustain life on earth.***

Few methods adopted by me to have a sustainable life-style

Sustainable Transportation Methods- Early every parent was dropping their child by car to the bus pick station. We established a car-pooling system to drop our children. A single parent every month on rotational basis was made responsible for dropping them. We believe in using public transport when ever possible and reducing vehicle trips.

Reuse- As I come from an extended family and all our children are within the same age group, we believe in rotating the clothes in the family itself instead of throwing them away. We used some old bedsheet to make cloth bags that we use while grocery shopping.

Reuse of waste water – In my hometown we use waste water from kitchen to water our plants.

Contribution towards society – I feel it is my primary duty to give back to the society. In order to do so I give monetary donation under “Friends for Society” a group formed by few MSSSPL employee and JCMM faculty in order to sponsor a child’s education. My family and I also believe in non-monetary donation so we donate old clothes, toys, books to the needy.

Tree plantation - We have planted many plants in our house taking into consideration the medicinal value. We have planted Tulsi as it gives out oxygen for 20 hours and ozone for four hours a day along with the formation of nascent oxygen which absorbs harmful gases like carbon monoxide, carbon dioxide and sulphur dioxide from the environment.

Additionally we observe optimum use of electricity, water resources and non-renewable fuel.



-Mr. Pramod Ingle
ITS Department

Kaizen: Going Green

Resource efficiency is a challenge faced by the wider global community. To drive the sustainability movement in MSSSPL , we all contribute and engage our selves in adopting sustainable methods at work place.

To promote this concept , we as a team took a small kaizen in our own department.

As routine practice we were maintaining test records as hard copy i.e printed format and simultaneously entering the results in SAP. There were two printed formats one for tensile test and the other one was Jominy test. Maintaining hard copies was helping us as a second line defence to prepare the TCs (Test Certificate) in manual mode in case of failure in SAP network, also as a first hand reference of old data without dependency to other function. But in order to be responsible and committed to our sustainability initiative we decided to migrate to maintaining soft copy of records instead of hard copy. For this an excel file was created in the system keeping all the security aspect in mind. Initially we had to test run both the system for a while to see any disadvantage in the changes. We found the changed system very user friendly and very effective

from traceability point of view. It also helped us to make SPC (Statistical Process Control) for establishing and eliminating deviations. Above all we found it to be very cost effective .We have saved considerable number of papers per year and cost. It gives us satisfaction that we could contribute something to the environment .

Team Members
QA Department



Mr.Rahul Badve



Mr.Harshad Pingale



Ms.Priyanka Dabrase

J.C.M.M. Goes Eco-Friendly



As the part of Green School Program and ECO club activity, JCMM School took initiative to plant as much as possible trees. The Students of J.C.Mahindra Memorial School participated in the plantation drive on 1st July , but with an added aim- ' to plant and adopt a plant'.

Each Eco-club member has planted a sapling, adopted it and is nurturing it to grow into a tree. On the occasion of the installation of the Eco-club Body Members, the Principal, Mr. Prashant Kitkule took the children to a future mode where they could visualize their trees in the school premises even years after they left the School. The children were excited by the thought of ownership and pledged to 'Plant one, adopt one, nurture it and grow it.'

Adding colours to the event J.C.M.M. School had also organized a 'Vruksha Dindi.' The Tulsi, a sacred plant with lot of medicinal values, was symbolically empowered by carrying it on 'Palkhi'. Girls and boys dressed as Warkari's sang keerthans & bhajans describing the need of plants to maintain the ecological balance. This added luster to the event. Participation of the neighborhood residents was observed. Students formed groups to explain to the public the role of trees in reducing pollution. All students from Std. V to X had participated in the rally with illustrative placards conveying green messages. Slogans in both English and vernacular



Awareness Rally

language, Marathi, filled the air. A huge crowd had gathered at MSSSPL main gate to welcome the 'Tulsi Palkhi.' Mr. Krishna Mandke, CEO of MSSSPL performed the 'Tulsi Poojan' and appreciated this initiative taken up by J.C.M.M. School under the guidance of Principal Mr. Prashant Kitkule .

Under the guidance of Mr. Abhimanyu Mane, Ms. Manali Joshi and Ms. Sandhya Dandkar the students presented impressive 'Bharud', a street play which effectively conveyed the message 'Save Trees Save Earth'. The Eco club president Vikrant Mahajan read out aloud the feelings of a tree through a letter written to Man. The girls in traditional nauvari sarees presented a 'Ringan Dance'.

The J.C.M.M. School team accomplished its mission to create awareness and readiness to plant trees and take care of them. The tree plantation event educated the students about the benefits of trees and fostered environmental sensitivity in them. It brought them closer to the environment.

**-Mr. Prashant Kitkule
JCMM School**



Tree Plantation

Green Fingers

Today the MSSSPL plant nursery has more than 1000 sapling on an average growing inside the campus of MSSSPL .The nursery hosts various medicinal plants like -tulsi , neem ,aloe vera , amla (Indian gooseberry) and shade trees like gulmohar , devils tree , ashoka and others being papaya, drumsticks ,rose etc .

Mr. Kashinath Pawar and Mr. Chiman Waghela are assisting in the nursery under the guidance of Mr. Hanumant Chavan and have been known to have green fingers. They have developed an attachment to the plants and have deep understanding of various species which help them nurture the plants efficiently.

"Green Desk" was one of the successful event celebrated during environment month in MSSSPL.Proactively Mr.Pawar and Mr.Waghela collected waste and reusable containers like old mug, glass bottles, plastic bottles to cultivate saplings in them. These sapling were then distributed to employees of MSSSPL. Owing to their contribution in this program MSSSPL desks have gone greener.

Plant nursery at MSSSPL



Environment Month
Connecting People With Nature

World Environment Day (WED) occurs on 5th June every year, and is the United Nation's principal vehicle for encouraging worldwide awareness and action for the protection of our environment.

The Environment month commenced on 5th June 2017 at MSSSPL with the theme "I am with Nature". The emphasize was on creating a sustainable & healthy environment as well as encourage employees to further focus on environment-friendly, low-carbon and resource-efficient initiatives.

Environment month was celebrated with wide spectra of activities engaging the employees, JCOMM school students and faculty members. A plantation drive was organized for two consecutive days wherein the employees of MSSSPL planted medicinal and shade trees in the premises of the factory. Followed by, training sessions on "Handling Hazardous Waste and Storage" and "Know our Carbon Footprint" were organized to make employees aware of the impact of their action on the environment. Other events like interdepartmental Quiz competition for employees and poster competition for JCOMM school student were also organized. A spectacular rally was organized by the JCOMM School as an awareness program which received huge appreciation from the community around. "Green desk" was promoted by collecting waste container like old cups, glass bottles, dishes, pots etc from the employees and plants were provided in these containers to keep in their offices. A "Nature Photography Competition", was conducted wherein the employees were encouraged to connect to the environment, to spend weekend in nature and click photographs. The competition received an overwhelming response crossing over 500 + photos submitted by the participant.

We request you all to keep the objectives of this campaign in mind throughout the year and convert them into actions accordingly in the form of beautifying the surrounding areas through plantation and cleanliness, saving water, less use of electricity, saving wildlife, and so on.

"We have only one planet to live on, it is our home and only we are responsible to maintain its natural beauty forever."

**-Mr. Arjun Nanaware
EHS Department**

Medicinal tree plantation drive



Shade tree plantation drive



Training session on Hazardous Waste Handling & Storage

Plants cultivated for "Green Desk"



Training session "Know our Carbon Footprint"



Environmental Quiz Competition