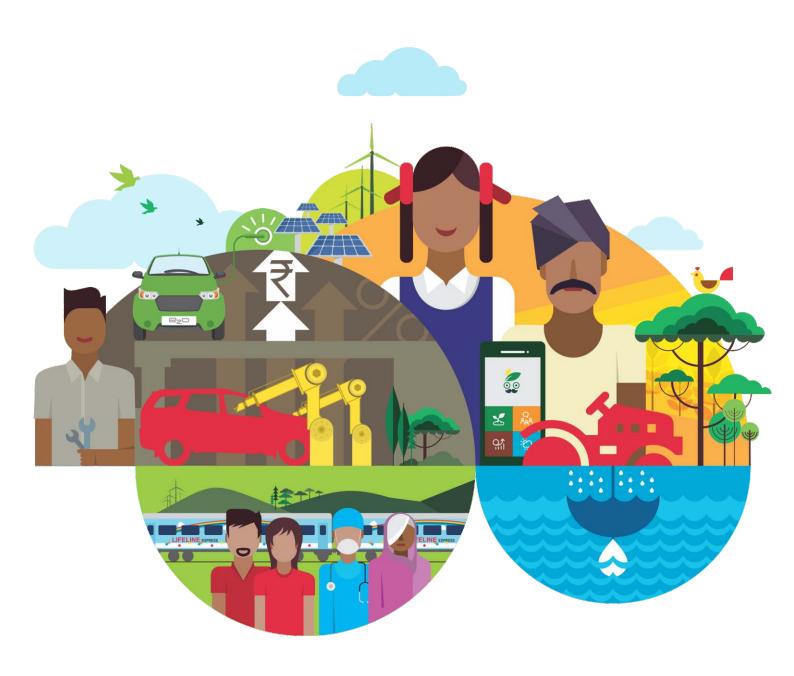


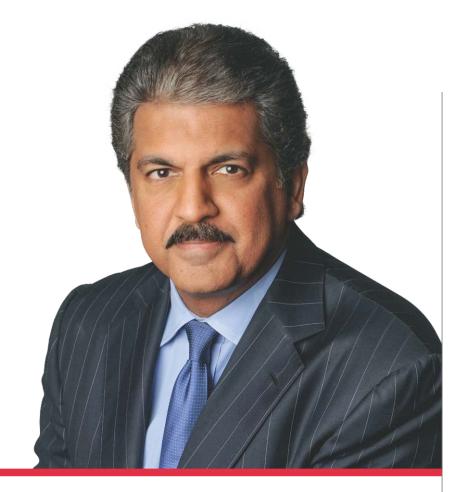
# Rise for Good



## **INDEX**

EXECUTIVE MESSAGES	01
REPORTING PROCESSES	05
COMPANY PROFILE	06
CORPORATE GOVERNANCE	09
SUSTAINABILITY AND US	12
DRIVEN BY OUR PEOPLE	23
PRODUCT PERFORMANCE	30
ECONOMIC PERFORMANCE	38
ENVIRONMENTAL PERFORMANCE	45
SOCIAL PERFORMANCE	63
ANNEXURES	73

## MESSAGE FROM THE CHAIRMAN



Science Based Targets are good for planet, they are good for profits too. Mahindra Group businesses have demonstrated that decarbonisation is possible while boosting employment, investment, and innovation.

Our Rise philosophy is all about seeing problems as opportunities to grow, learn and improve. We look at Climate change in the same light. To us, climate change offers a financial and business opportunity worth \$6 trillion over the next two decades.

To make the most of this opportunity, we need to Rise to the occasion - collaboratively.

I have been evangelising at various international and national fora for corporates to come forward and align their strategies with the aspirations embodied in the Paris Agreement through the Science Based Targets (SBTs) initiative. This will provide them a defined pathway to future-proof growth.

The Mahindra Group is committed to the Paris Agreement. Thirteen Group companies including M&M Ltd. have committed to SBTs initiative.

Two Mahindra companies with the highest emissions - Tech Mahindra and Mahindra Sanyo Special Steel - had already committed to SBTi earlier this year and MSSSPL has since become the first metals company in the world to have approved science based emissions targets.

While SBTs are good for planet, they are good for profits too. Mahindra Group businesses have demonstrated that decarbonisation is possible while boosting employment, investment, and innovation. We are already generating revenue of USD 400 million from our green businesses.

In the last 5 years, we saved enough energy to supply electricity to 14,525 Indian homes for a year.

Here are some of the initiatives undertaken at M&M to contribute to the planet, people and to do so profitably.



Mahindra & Mahindra continues its commitment to reduce its carbon footprint. In 2016, M&M became the first Indian company to announce its internal carbon price of \$10 per tonne of carbon emissions. The move was in line with its business commitment to reduce its GHG emissions by 25% over the next three years. We have taken on emission and carbon footprint reduction targets as per the SBT framework, which is a testimony of our continuing efforts to combat climate change.

All our plants have been recertified under the ISO 14001: 2015 and OHSAS 18001:2007 standards and are in the process of adopting the revised environmental standard ISO 14001: 2015.

# Over the last two years, our total water consumption has come down by almost 1,34,696 m<sup>3</sup>.

Automotive Sector and Farm Equipment Sector recycled and reused 35% and 43% respectively of the total water consumed.

Our flagship initiative, Hariyali has become a tree plantation movement. In FY 2017-18, over 1.5 million trees were planted under the project. Of this, M&M alone planted 1,302,488 trees.

We follow a zero-waste philosophy and manage waste at every stage- from prevention to minimisation, from reuse to recycling and from energy recovery and disposal. As part of this philosophy, five plants were certified as zero waste to landfill in April 2018.

# PEOPLE TY

Our people have been driving sustainability at M&M and they will continue to do so. Science-based targets will provide our employee with more opportunities to share their ideas on innovation and technology which will in turn help us in delivering value in the future.

Diversity is also gaining increasing focus. When we started our gender diversity journey, women constituted 16% of our total workforce.

# Today, there are 26% women at the entry level and 7% at the mid and senior leadership levels.

The Mahindra Leadership University (MLU) is a strategic initiative to groom and develop our talent. Mahindra & Mahindra MLU provided more than 16,59,620 man-days of training in FY 2017-18 to create leaders with both leadership and domain capabilities.

We work for a brighter future not just for ourselves, but also for the communities where we operate. Our CSR contributions stand at INR 81.97 crore in FY 2017-18 with a focus on the girl child, youth and farmers in the domains of education, health and environment

Livelihood training followed by placements was provided to 6,323 young people through the Mahindra Pride Schools and 41,687 were trained through the Mahindra Pride classroom model.

Nanhi Kali, a flagship CSR project that supports the education of underprivileged girls is supporting 1,43,992 Nanhi Kalis across 4,900 centers, in 12 states.

Our Integrated Watershed Management Program with the government of Madhya Pradesh has been implemented in 48 villages benefiting 35,265 people.

## PROFIT

FY 2017-18 was a good year for M&M with a sterling performance, both by the Auto and Farm Equipment businesses. A normal monsoon, along with a revival in rural demand, strong cost focus and a turnaround in the trucks business, ensured that along with top-line growth, the Company posted a strong bottom-line growth as well.

The Mahindra Group crossed INR 2 trillion in market capitalisation during the year. This is a testimony to its commitment to the Rise of all its stakeholders.

The future looks bright as we rise to the opportunities hidden in the challenge called climate change.

**Anand G. Mahindra** Chairman, Mahindra Group

# MESSAGE FROM THE CHAIRMAN, GROUP SUSTAINABILITY COUNCIL



At Mahindra, we took
the three brand pillars of
Mahindra's rise philosophy accepting no limits,
alternative thinking and
driving positive change to the next level this year.
We worked harder,
smarter and faster to make
our products more sustainable.
Our innovations focused on
making processes
environment friendly.

Mahindra's impact in the area of sustainability is the result of actions taken by our colleagues across the company. This reporting year the Mahindra Sustainability Framework was formally launched on 2<sup>nd</sup> October, 2017 at all Mahindra locations across the country. The Framework is now a guiding light in all the sustainability programs and initiatives taken up by the company.

## ENGAGING THE EMPLOYEES

While the company has taken a lot action to reduce its carbon footprint, the highlight of the year was the scaling up of actions taken by individual employees to adopt sustainable practices in their lives. More than 25,000 people across the company adopted LED lights, energy efficient fans, energy efficient air-conditioners and aerators for taps. Many employees took steps to reduce their energy consumption at home and participated in a competition run by the company. They also adopted cloth bags instead of plastic and enthusiastically participated in programs where experts explained how each individual could reduce his or her own footprint.

## DEVELOPING TALENT

Our goal is to be one of the top 50 most admired global brands by 2021 and it is only our people who can help us reaching that goal.

We consistently encourage gender and cultural diversity among our workforce. It is a matter of pride that the Swaraj Division experienced a 65% increase in women employees in core tractor manufacturing over last year.

To ensure that this talent pool is equipped with the right skills to navigate the emerging business landscape we have regularly conducted training sessions. During the reporting period the company devoted about 60,000 mandays towards trainings which are imparted through the innovative Mahindra Leadership University, which is a strategic initiative to groom and develop talent.

The employee social media outreach initiative, M-advocates, created 1,500 pieces of Mahindra related content which led to over 400,000 engagements and garnered over 22 million impressions on social media.

They were also exposed to the intensive work done in Mahindra factories on energy efficiency and adoption of the ideas developed during the exposure visit helped them reduce their costs of operation.

that we will achieve the goal long before the deadline of 2030. In addition the quantum of renewable energy in our energy basket jumped from 3,909 MWh in the previous year to 8,972 MWh this year, an increase of over 100%.

## EXCELLING WITH PRODUCTS

Mobility and agriculture are two key areas for impact in the sustainability journey and Mahindra and Mahindra Ltd. is well positioned to make a contribution in both. In the last financial year we made significant progress in both the e-mobility and the farm equipment spaces by introducing products that are eco-friendly.

Mahindra actively engages with all electric mobility platforms in the country to enable the success of this new form of environment friendly transportation. It is a key partner in the government's effort to promote electric mobility in the country.

This year we added the e-Alfa Mini, a 3-wheeler to our e-portfolio of e2oPlus, eVerito, and eSupro. Not only do our electric vehicles reduce pollution by eliminating tailpipe emissions, they also significantly reduce fuel costs for owners and operators of our vehicles.

Mahindra has initiated the journey towards driverless tractors, one of the key components of precision farming. This technology is set to make farming more profitable and address the issue of agricultural labour shortage that farmers are experiencing in different parts of the country. In addition we also unveiled the Trackstar- a new tractor for small farmers of the country.

## ADOPTING TECHNOLOGICAL ADVANCEMENTS

To develop and deliver products of the future, one needs to adopt and adapt to the technologies and processes of the future. Next generation digital technologies are impacting conventional business models and this trend will only accelerate in the coming years.

We are taking rapid strides in this new world and are amongst the first in India to adopt Industry 4.0. and leverage it to automate and integrate shop-floor processes and machines at Mahindra & Mahindra.

To enable lifelike experience of products before they are manufactured or prototyped and thereby save precious resources and time, Mahindra Research Valley has set up a Virtual Reality Lab.

On the customer side the business is using virtual reality to take the showroom experience where showrooms do not exist and also enhance the experience within showrooms. The business is trying to leverage blockchain and other digital technologies to deliver products and services in a better manner.

The year also saw one of our factories become the first in the country and the second in the world to be certified as a zero waste to landfill location.

As a concerned corporate citizen we are eager to address environmental issues of national importance. With the aim of addressing the Delhi air pollution crisis caused by burning of crop residues, we have joined hands with Indraprastha Gas Limited (IGL) to design and develop plants to produce compressed natural gas from crop residues and organic waste.

The cultivators will earn from the waste produced in their farms and the emissions from crop residue burning will reduce apart from reducing the impact of crop residue burning on Delhi's air pollution.

## PARTNERING THE SUPPLY CHAIN

Members of the supply chain are a key part of our success. In the course of the year a number of programs were done with and for our suppliers to help them become more sustainable.

Most notably more than 200 of our suppliers adopted the LED program at their premises and joined M&M in the journey to be 100% LED companies.

## REJUVENATING THE ENVIRONMENT

Carbon pricing, water neutrality, zero waste & circular economy have been well established pillars of our environmental bottom-line.

As part of our ongoing endeavor to reduce the natural resource footprint of our operations the energy required to produce one vehicle continued to go down towards the EP100 target of doubling energy productivity on a 2009 baseline. It is clear

## EMPOWERING THE COMMUNITY

The ultimate goal of doing business at Mahindra is to drive positive change in the lives of our stakeholders and enable them to rise. This year there was impressive growth in the number of beneficiaries of our community outreach programs. The Nanhi Kali project has positively impacted the lives of 1, 43,992 underprivileged girls, an increase of 10% from 2016-17.

Stakeholder feedback is a key driver of our sustainability strategy. I would urge you to read this report and share with us your views and comments on how we can make our world more sustainable and inclusive.

hym

**Ulhas N. Yargop**Chairman, Group Sustainability Council,
Mahindra Group

# REPORTING PROCESS

### ■ REPORT BOUNDARY

The reporting period of M&M Ltd. for its 10th Sustainability Report is 1st April 2017 to 31st March 2018. As mentioned in our first Sustainability Report in FY 2007-08, we remain committed to report our triple bottom line performance on an annual basis.

For this Report, we are following the GRI Sustainability Reporting Standards. The most widely adopted non-financial reporting framework in the world, the GRI Standards are used to help communicate sustainability performance and encourage transparency & accountability. This year too, the Report is aligned with the nine principles of Ministry of Corporate Affairs' National Voluntary Guidelines (NVG) on social, environmental and economic responsibilities of business. There have been no significant changes in the scope of the report from that reported in the Integrated report 2016-17.

## The Report includes



- Mahindra & Mahindra Ltd.
   Automotive Division (AD)
- Mahindra & Mahindra Ltd.
   Farm Division (FD)
- Mahindra & Mahindra Ltd.
   Swaraj Division (SD)
- Spares Business Unit (SBU)
- Mahindra Research Valley (MRV)
- Corporate Centre -Mahindra Towers - Worli (CC)

## Report Scope Limitations



This Report is India-centric and excludes:

- International operations
- Businesses which were acquired or commenced operations in FY 2017-18
- Companies/plants/locations of manufacturing sectors
- Mahindra Trucks and Buses Ltd. (MTBL)
- SsangYong Motor Company Ltd.
- · Swaraj Engine Ltd.
- Mahindra Gujarat Tractor Ltd.
- Mahindra (China) Tractor Co.
- Mahindra USA INC
- Mahindra Yueda (Yancheng) Tractor Co.





This report has been externally assured by DNV GL.

This report has been prepared in accordance with the GRI Standards: Core option.



Your valuable feedback and suggestions are solicited to sharpen our efforts and reports. Please spare a few minutes to share your insights. Please email your suggestions / views / opinions to: sustainability@mahindra.com

Location of the organisation's headquarters

MAHINDRA & MAHINDRA LIMITED

Gateway Building, Apollo Bunder, Mumbai 400 001



## COMPANY PROFILE

### **■ MAHINDRA GROUP**

The Mahindra Group is a USD 20.7 billion federation of companies that enables people to rise through innovative mobility solutions, driving rural prosperity, enhancing urban living, nurturing new businesses and fostering communities.



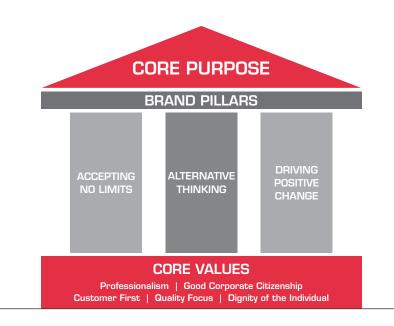
## Headquartered in India, Mahindra employs over 2,40,000 people across 100 countries

Though we operate across vast geographies, our governing spirit of 'Rise' binds us as one Mahindra, dictating that we empower people everywhere to not only chart new frontiers, but to conquer them too.



It enjoys a leadership position in utility vehicles, information technology, financial services and vacation ownership in India and is the world's largest tractor company, by volume.

It also enjoys a strong presence in agribusiness, aerospace, commercial vehicles, components, defense, logistics, real estate, renewable energy, speedboats and steel, amongst other businesses



We remain committed to investing in technology, growing our global presence and maintaining our leadership position.

Our vision is to to make 'Mahindra' one of the 50 most admired global brands by 2021.

A brand that is innovative, a brand that is global and a brand that cares. Guided by the three pillars- 'Accepting No Limits, Alternative Thinking and Driving Positive Change', we strive to build not just products and services, but new possibilities for a truly sustainable future.



Learn more about Mahindra on www.mahindra.com / Twitter & Facebook @MahindraRise

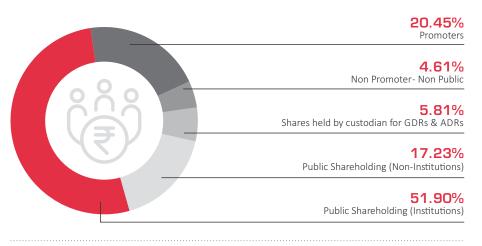
## **■**M&M LIMITED

Mahindra & Mahindra Ltd., a mobility products and farm solutions provider, is the flagship Company of the Mahindra Group. Since assembling our first vehicle in 1947, we have grown rapidly. Today, we offer a wide range of products and solutions ranging from SUVs, electric vehicles, pickups, commercial vehicles, tractors, two-wheelers, small aircraft and boats that are tough, rugged, reliable, environment-friendly, and fuel-efficient.

We are one of India's leading vehicle manufacturers and its leader in utility vehicles. The only aircraft maker in India, we are the pioneers in electric car manufacturing. Production of boats makes us the country's only manufacturer with vehicles on land, air, and sea. We commenced our exports in the 1960s, and today, our vehicles and tractors can be found in all six continents of the world in over 70 countries.

## **Shareholding Pattern**

As an Indian multinational with a global drive, we have a diversified shareholding pattern.



For more information about our shareholding pattern, please refer to page 98 of our Annual Report 2018. http://www.mahindra.com/resources/investor-reports/FY18/ Announcements/Mahindra-and-Mahindra-Annual-Report-2017-2018.pdf

## ■ AUTOMOTIVE DIVISION

Our story in mobility began in 1947 with assembling a Willys- a ready-for-anywhere vehicle. From that introduction of the utility vehicles to India, we have a come a long way to be a leader in the segment and a leading vehicle manufacturer. We have also expanded in terms of geography with our vehicles running across six continents, in over 70 countries.



In 2017-18, we achieved a milestone of



## **Businesses in the Division**

http://www.mahindra.com/business/automotive

Mahindra Graphic Research Design\*

**Mahindra Vehicle Manufacturers Limited** 

Spares Business Unit (SBU)

Mahindra Navistar Automotive\*

SsangYong Motor Company\*

Mahindra Electric (formerly, Mahindra REVA)

\*Mahindra Graphic Research Design, Mahindra Navistar Automotive, SsangYong Motor Company are not in the scope of this report.

## **■ FARM DIVISION**

Starting with India's Green Revolution in the 1960s, we made 'driving rural prosperity' one of our defining goals. Now, after more than 5 decades, with end-to-end mechanisation, agri-inputs, advisory and post-harvest services, we empower farmers everywhere.

We've been India's leading tractor maker for over thirty years, with a 40%+ market share and our tractors are tilling land in more than 40 countries.

Introduced MyAgriGuru, a digital platform that connects the farmers and agri-experts across the country. They interact with each other in a real-time manner on the platform.



### **Businesses in the Division**

http://www.mahindra.com/business/farm-equipment

Mahindra (China) Tractor Co.\*

Mahindra Yueda (Yancheng) Tractor Co.\*

Micro-irrigation Business EPC Industries Ltd.

Mahindra USA Inc.\*

Mahindra Samriddhi

## **Mahindra Powerol**

\* Mahindra (China) Tractor Co., Mahindra USA Inc. and Mahindra Yueda (Yancheng) Tractor Co. are not in the scope of this report.

For complete details on how our products create value for our customers and the environment, please refer to the Product Performance section of the report.

### AWARDS

At Mahindra, awards are not the ends, they are the means to create more value. They not only build the brand, but also motivate the employees to work to their highest potential, encourage the customers to buy our products with confidence, and inspire all our stakeholders to proudly associate with us.

The recognitions are a reassurance of our right direction and enhance our belief to continue on the track to achieve our purpose. Below are some of the significant honours received during the year:

#### **Environment**



- 6 M&M plants have won the CII National Energy Conservation Awards and the CII National Water Management Awards
- Zaheerabad plant was awarded the National Energy Conservation Award 2017
- AD Kandivali Foundry bagged the Green Foundry of the Year award for 2017

## Sustainability

- M&M won the Indo German Chamber of Commerce Award 2017 for 'Best Sustainable Business Practices'
- M&M (Igatpuri) won the Global Sustainability Award (Platinum Rating) and Best Sustainability Initiative Pavilion at The World Renewable Energy Congress organised by The Energy and Environment Foundation and supported by MNRE



## **CSR**



- FICCI Road Safety Analysis & Action Award for 'Zero Fatality Corridor' project on the Mumbai Pune Expressway
- Socially Aware Corporate for the Year 2017 by Business Standard for 'Zero Fatality Corridor' Project on Mumbai Pune Expressway
- Energy and Environment Foundation Global CSR Award for 'Zero Fatality Corridor' Project on Mumbai Pune Expressway
- Corporate Citizen of the Year 2017 by Economic Times for Nanhi Kali and Integrated Watershed Management Programme at Damoh, Madhya Pradesh
- CSR Journal Excellence Award for Agriculture & Rural Development for Integrated Watershed Management Programme at Damoh, Madhya Pradesh



## **Supply Chain**



- AD Haridwar plant won the 'Manufacturing Supply Chain Operational Excellence-Automobile Category' in the 'Manufacturing Supply Chain Awards' organised by Kamikaze B2B Media
- AD Kandivali SCM Team bagged the Manufacturing Supply Chain Award for Operational Excellence in Procurement
- MVML wins big at the SCM Pro's 3rd Logistics & Supply Chain Awards 2017

### Others

- AS Nashik Plant was the winner of ISMS Best Practices competition
- FD Nagpur Plant bagged the first prize in ISMS Best Practices competition
- Igatpuri Plant awarded in 3M competition by CII at New Delhi
- Mahindra Powerol and Mahindra CE honoured at the EPC World Awards 2017
- Tool and Die Plant Nashik won the Excellence Award at NCQC 17 at Mysore
- AD Nashik Plant bagged the Greentech Safety Award 2017







## CORPORATE GOVERNANCE

Good governance is the cornerstone of a successful and sustainable company. At Mahindra, governance has been part of the DNA of the company right from its inception and has been embedded into our brand. It enables better decision making and performance, gives us strategic competitive advantage, increases stakeholder confidence and trust, and generates long-term sustainable value for the stakeholders.



We have chosen to be transparent, despite there being no mandate on us. For instance, we have been reporting back to our shareholders on corporate governance, long before the law made it mandatory. We have institutionalised the highest benchmarks of corporate working and behaviours in our processes.

A set of core values and corporate governance policies have been articulated and structures like the corporate governance council are firmly in place to ensure that all governance issues are effectively and transparently addressed. We place great emphasis on empowerment, integrity and safety of our employees, maintaining a diverse and vibrant work environment, and upholding transparency in all our dealings.

Our governance efforts have paid off sustainably not just in financial value but has also delivered on intangibles such as increased reputation and goodwill.

## M&M has consistently delivered returns way above the market - 19% over 25 years.

We are one of the top 50 most admired brands globally and occupy a unique position that we have achieved through keeping the governance to the highest level.

M&M has also been proactively complying with regulatory requirements. We have 70% independent directors on board, which is

higher than the 50% requirement. The audit committee of M&M was constituted in 1987, which was 17 years before regulator made it mandatory. We have been spending 1% of our net profits on CSR from 1995, much before Companies Act 2013 made it mandatory.

Through our governance practices we have been able to infuse trust and confidence among our stakeholders, attract and retain financial and human capital, and maintain the social & relationship capital.

We follow UNESCO's definition of Governance – it refers to the structures and processes that ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment and broad-based participation.

We are also planning to put in place a mechanism that will institutionalise governance as a process.

All key decision points will be tested for its following 3 'C's, which form the root of governance. Also, in order to institutionalise governance as a process, every point of decision making needs to be tested for 3 'C's-competency, compliance and conflict-of-interest eradication.

### **■SHAREHOLDER VALUE**

At M&M, prosperity and value creation for our shareholders doesn't come at the expense of environment and community. We believe in creating shared value for society by addressing its challenges. This helps us reconnect our success with the social progress.

Apart from sharing the value, we also empower our shareholders with the knowledge of how we create, sustain and enhance value by utilising financial, manufactured, intellectual, human, social, and natural capitals. We have interactive platforms in place where we share the performance and progress, while soliciting pointers and perspectives. These lead to possibilities and plans that results in increased shareholder value as well as trust.

## GOVERNANCE FRAMEWORK

The purpose of Mahindra's governance framework is to provide prudent management and oversight of business to protect the interest of all the stakeholders. It brings all our businesses, subsidiaries, associates and joint ventures under its ambit and firmly instils the Group's objectives in everyday operations. The framework includes comprehensive monitoring of the progress and spearheading operational excellence across verticals.



## **Board of Directors**

The Board at Mahindra thinks strategically and makes sure that we stick to the mission, values, and serve the customers and key stakeholders well. The composition of the Board of Mahindra & Mahindra Ltd. is in conformity with Regulation 17 of the Listing Regulations.

The Executive Chairman of Mahindra & Mahindra Ltd., though a Professional Director in his individual capacity, is a Promoter and the number of Non-Executive and Independent Directors is more than one half of the total number of Directors.

Mr. Anand G. Mahindra, Executive Chairman and Dr. Pawan Goenka, Managing Director are the Whole-time Directors of Mahindra & Mahindra Ltd. The remaining Non-Executive Directors, comprising eight Independent Directors including a Woman Director and one Non-Independent Director who are highly renowned professionals drawn from diverse fields, possess the requisite qualifications and experience which enable them to contribute to our growth and enhance the quality of Board's decision-making process.

### **Board Committees**

Board committees are important for members to understand their individual responsibilities and for the Board to organise itself and perform the necessary tasks effectively. At M&M, these committees ensure implementation, streamlining, monitoring and giving appropriate direction to the day-to-day working of the companies.

Currently, the Board has the following Committees:

- Audit Committee
- Governance Remuneration and Nomination Committee
- Share Transfer and Shareholders / Investors Grievance Committee
- Research & Development Committee (a voluntary initiative of the Company)
- Strategic Investment Committee (a voluntary initiative of the Company)
- Loans & Investment Committee

   (a voluntary initiative of the Company)
- Corporate Social Responsibility (CSR) Committee



For more information on each committee, roles and responsibilities of the directors and the members, please refer page no.139 of our Annual Report FY 2017-18. http://www.mahindra.com/resources/investor-reports/FY18/Announcements/Mahindra-and-

Mahindra-Annual-Report-2017-2018.pdf

## PURPOSE AND VALUES

The purpose of Mahindra's governance framework is to provide prudent management and oversight of business to protect the interest of all the stakeholders. It brings all our businesses, subsidiaries, associates and joint ventures under its ambit and firmly instils the Group's objectives in everyday operations.



To challenge conventional thinking and innovatively use all our resources to drive positive change in the lives of our stakeholders and communities across the world -

to enable them to rise.

## **CORE VALUES**

Our Core Values inspire us to enable the world to Rise and lead by sustainability-social, economic and environmental. They are an amalgamation of what we have been, what we are and what we continue to be:

## **Good Corporate Citizenship**

**Professionalism** 

**Customer First** 

**Quality Focus** 

Dignity of the Individual

## Code of Conduct

The Code of Conduct clarifies an organisation's mission, values and principles, linking them with standards of professional conduct. Ethiquette, our Code of Conduct, is our central policy document which is benchmarked with the best in business. It outlines the principles that every single person working for and with the Company, must comply with regardless of location. In addition, individual business units issue policies that provide more specific guidance about certain business practices.





The CoC enables effective stakeholder engagement, faster & fairer decisions, transparent & unambiguous processes, and a professional & ethical conduct. It underlines our responsibilities to our people, partners and shareholders as well as mandates us to:

- Behave in an ethical manner, take pride in our actions and decisions
- Comply with the principles and rules in our Code, and fulfil our legal and regulatory obligations
- Seek guidance wherever required if we feel a working practice is not ethical or safe
- Report non-compliance or breach of our Code immediately



For more information on implementation of the Code of Conduct, please refer to page 145 of our Annual Report FY 2017-18.

## **■ POLICIES**

Our policies are outcomes of our commitment to our core values and that guide us in our day-to-day operations and help in governance. They continuously evolve with prevailing regulations and by interactions with stakeholders.

A snapshot of our policies: Corporate
Communications | Disaster Management |
Employee Relations | Environment and
Pollution | Capital Budgeting | Corporate
Finance | Quality | Corporate Representation
in Trade & Industry Forums | Dealing with
Dealers and Customers | E-business Security
Insider Trading | Intranet Usage | Investor
Grievances | Investor Relations | Safety &
Occupational Health | Human Resources |
Sexual Harassment | Trade Marks | Suppliers
and Vendors of Services & Products | Green
IT Guidelines | Green Supply Chain
Management

## Business Responsibility Policy

We abide by an all-embracing Business Responsibility policy incorporating economic, social and environmental accountabilities of business as approved by our CSR Committee Board.

It is formulated in alignment with the nine principles of Business Responsibility, required by SEBI as per clause 55 of the Listing Agreement.



For more information on what this policy covers, refer to our Annual report http://www.mahindra.com/resources/investor-reports/FY18/Announcements/Mahindra-and-Mahindra-Annual-Report-2017-2018.pdf

## Anti-corruption Policies and Procedures

At M&M, we have zero tolerance against any kind of corruption and strict action is taken against anyone found indulging in such unprincipled act.

Corporate Governance & Business Ethics are an essential part of our induction process and an integral part of our Code of Conduct. All employees are expected to exhibit the highest level of integrity in every sphere of activity.



### **■ COMPLIANCE**

Compliance is a non-negotiable at Mahindra. Our compliance committee ensures that all regulations are respected in letter and spirit. Being a global company, we abide by all international and national laws, and uphold the standards of transparency and accountability.

## During the last decade of reporting, there was no instance of non-compliance by the Group.

We incurred no fines from any regulatory authority for non-compliance of laws and regulations in the reporting period.

## Regulatory Compliance

We strictly adhere to all the regulatory laws, guidelines and specifications relevant to our business. Our audit committee ensures strict adherence and regulatory compliance, round-the-year. In case any related observations are made, they are immediately brought to the notice of the site senior management and necessary corrective actions are executed.

Regulatory compliance is periodically reviewed by the Group Executive Board (GEB).

## e-Cockpit Portal for Regulatory Compliance

With the objective of further improving our compliance processes, we have created e-cockpit, an electronic platform, through which various stakeholders such as shareholders, board of directors, key managerial personnel and other stakeholders can interact, within the overall regulatory framework. The portal will provide information that is required for various stakeholders to ensure their compliance.

## **■ PUBLIC POLICY AND ADVOCACY**

Businesses flourish in a sound legal and regulatory environment. For such an environment to emerge it is important that private sector participates in the policy-making process.

As one of the biggest automotive manufacturers in India, Mahindra & Mahindra serves as a unified voice for the industry to help the government shape better policies.



Our top management has a constant dialogue with the policy makers and influencers in the national and international bodies to provide our industry with specialised information and knowledge.

#### **Anand Mahindra**

Executive Chairman- Mahindra & Mahindra Ltd.

### **Ulhas Yargop**

Group President (IT Sector), Group CTO & Member, Group Executive Board

#### Pawan Goenka

Managing Director- Mahindra & Mahindra Ltd.

## V. S. Parthasarathy

Group CIO- M&M Limited and Mahindra Group



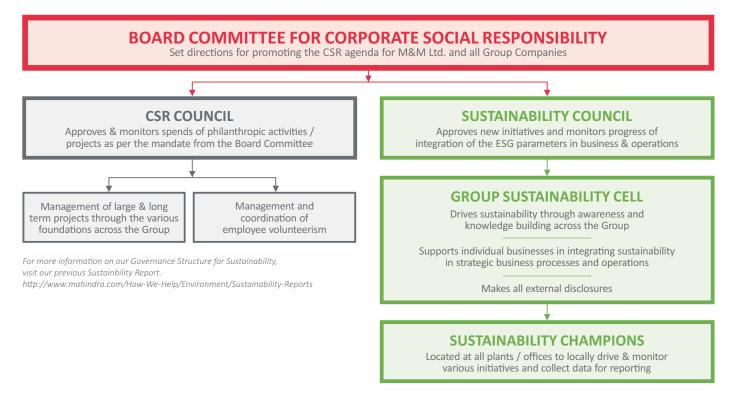
For more information about the memberships of our executive members in various organisations and institutions, please refer to page 140 of our Annual Report FY 2017-18

## SUSTAINABILITY & US

Sustainability has become intrinsic to our business behaviour and is the only way we do business. Last year we took a leap in our sustainability journey with a focus on rejuvenation rather than just focusing on conservation. This year we are taking this journey ahead. Our second integrated report gives insights into our performance for the year 2017-18 and what are the outlook and strategies for the year ahead.

## Sustainability Structure

Sustainability at Mahindra is governed by a top-down approach enabling strategic vision and action plan to not just steer grassroots interventions, but also monitor its effectiveness and disclose it transparently.



## **■ MATERIALITY**

Material Issues at M&M are what matters most to our stakeholders. It enables us to gauge stakeholder concerns, thoughts, attitudes and ideas towards social, environment and economic issues. It not only provides us the strategic business insights but also allows our stakeholders to be part of the decision making, builds rapport with them and bolsters trust. Our materiality mapping exercise addresses our precautionary approach to addressing issues of importance for the company.

Determining material issues in stakeholder identification is the first step which is followed by engagement mechanism in order to communicate with them on a regular basis.

The responses received from them are filtered and rated by the level of importance by us and our stakeholders. Accordingly, we arrive at our materiality for automotive and farm divisions.

We periodically evaluate our material issues to introspect as well as shape the future course of action across the triple bottom line. We have also continually enhanced the breadth and depth of our analysis to sharpen our materiality identification process.

## **AUTOMOTIVE DIVISION**











## PARAMETERS OF HIGH IMPORTANCE (TOP QUARTILE)

- 1 Cost Control and Profit Margin
- 2 R&D Impetus
- 3 Fuel Efficiency
- 5 Risk Assessment and Compliance
- 7 Market/Product Competition
- 10 Sustainable Mobility: Electric/Hybrid/H<sub>2</sub> Vehicle
- 11 Product Quality
- 18 Supply Chain Optimisation
- 19 Logistics Optimisation and Sustainable Logistics
- 20 Emerging Market Needs

- 9 End of Life Management
- 21 Water Intensity
- 22 Energy Efficiency
- 23 Recyclable/Recycled Material
- 24 Waste Generation
- 25 Climate Change and GHG Emissions
- **26** Pipe Emissions and Reduction
- 28 Life Cycle Management

- **32** Customer Satisfaction
- 33 CSR Management
- **34** Employee Productivity
- 35 Health and Safety
  36 Product Safety
- 44 Training and Education
- 48 Gender Diversity
- 55 Grievance Mechanisms

## PARAMETERS OF LOW IMPORTANCE

- **6** Solution Selling beyond Products
- 8 Integrated Sourcing
- 12 Light Weighting
- 13 Green Dealers14 Modularity in Design
- 15 Dealer Profitability
- 16 Sustainability IT Tool
- 17 Product Obsolescence and Phasing Out
- 4 Renewable Energy
- 29 Packaging
- 30 VOC Emissions in Paint Shop
- 27 Attrition
- 31 Employee Capability (Agility)
- 37 Succession Planning
- 38 Supplier Education
- **39** Customer Education
- 40 Traffic Safety41 Appeal to Customers
- 42 Talent Retention
- 43 Dealer Consistency (Talent Retention)
- 45 Customers' Satisfaction with Service
- 46 Urbanisation and Labour Scarcity
- 47 Average Age of Plants
- 49 Brand Image of Mahindra
- 50 Social Media
- 51 Shared Value
- 52 Supplier Satisfaction (Forecast Accuracy)
- 53 Strong Visionary Goals on Sustainability/Strategic Consideration
- 54 Employer Attraction
- 56 Average Age of Plants

### **FARM DIVISION**









## PARAMETERS OF HIGH IMPORTANCE (TOP QUARTILE)

- 1 Cost Control and Profit Margin
- 2 R&D Impetus
- 3 Fuel Efficiency
- 4 Farm Tech Prosperity (Farmer Prosperity)
- 7 Risk Assessment and Compliance
- **8** Solution Selling Beyond Products
- 11 Product Quality
- 13 Soil Health
- 14 Supply Chain Optimisation
- 15 Logistics Optimisation & Sustainable Logistics
- 16 Dealer Management
- 24 Market/Product Competition

- 17 Water Intensity
- 18 Energy Efficiency
- 19 Recyclable/Recycled Material
- 20 Waste Generation
- 38 Climate Change and GHG Emissions
- 39 Water Availability

- 25 Customer Satisfaction
- 26 CSR Management
- 27 Employee Productivity28 Health and Safety
- 29 Grievance Mechanisms
- 30 Supplier Satisfaction/Relationship
- 45 Training and Education
- 48 Gender Diversity
- 49 Talent Retention and Succession Planning

#### PARAMETERS OF LOW IMPORTANCE

- 5 Integrated Sourcing
- 6 Dealer Profitability
- 9 Product Obsolescence and Phasing Out
- 10 Sustainable Mobility: Electric/Hybrid/H2 Vehicle
- **12** Government Approvals
- 21 Light Weighting
- 22 Modularity in Design

47 Packaging

- 23 Brand Image of Mahindra
- 31 Employee Capability (Agility)
- 32 Attrition
- 33 Appeal to Customers
- 34 Dealer Consistency
- 35 Talent Retention
- 36 Supplier Education
- 37 Customer Education
- 40 Average Age of Plants
- 41 Product Safety
- 42 Customers Satisfaction with Service
- 43 Average Age of Plants
- 44 Urbanisation and Labour Scarcity
- 46 Traffic Safety

## Key Materiality Issues







**Supply Chain** 



Safety



Product Stewardship



Waste to Wealth



## SUSTAINABILITY ROADMAPS

The sustainability roadmap at M&M provides us the guidance on integrating sustainability-related goals and strategies across the organisation and the supply chain to create value for stakeholders. The Sustainability Roadmaps 2019 have more granulised targets with an aim to embed sustainability even deeper into our business.

## SUSTAINABILITY ROADMAP 2019 | STAKEHOLDER ENGAGEMENT - AD DEALERS

Commitment	Metrics	2016-17	F18 Target (2017-18)	Status F18	Responsibilities*
SUSTAINABILITY AWARENESS TRAINING	Nos.	Training through E-learning (40 dealerships)	Refresher training (40 dealerships)	<ul> <li>Dealers Sustainability Quiz.         More than 300 Dealers participated     </li> <li>Training and awareness material shared with all dealerships</li> </ul>	Dealership Manpower Training
CO, & WATER FOOTPRINT MAPPING AND REDUCTION	Nos.	Implementation of projects (40 dealerships)	Reduction by 3% (40 dealerships)	More than 200 dealerships have implemented LED, energy efficient appliance and capacitor panes in showrooms and workshop which resulted in reduction of more than 3%.     ETP installed for water recycle commitment	Zonal Heads
WASTE MANAGEMENT INCLUSIVE OF OIL	Nos.	Initiatives for waste management (40 dealerships)	Initiatives for waste management (40 dealerships)	More than 300 dealerships are disposing their hazardous waste (oil) with authorised vendor.     Recycling of corrugated cartons and reuse of wooden waste is implemented as per MDEP survey	Zonal Heads
GREEN DEALER AWARD	Nos.	Assessment & Decl. of Green dealers	Assessment & Decl. of Green dealers	Green Dealership award will be given based on all sustainability parameters in the month of July 2018	Sales Strategy

<sup>\*</sup> AFS Sustainability team will facilitate

## SUSTAINABILITY ROADMAP 2019 | STAKEHOLDER ENGAGEMENT - AFS SUPPLIERS

Commitment	Metrics	2016-17	F18 Target (2017-18)	Status F18	Responsibilities	
SUSTAINABILITY	Nos.	125 Tier I Suppliers - MTWL, SD, MTBD, Construction Equipment	250 Tier I Suppliers - MTWL, SD, MTBD, Construction Equipment	345 Tier 1 Suppliers trained on Sustainability through e-learning and classroom sessions	SSU, SD SCM, AFS Sustainability	
SUSTAINABILITY ASSESSMENT & IMPROVEMENT						
Self-Assessment (IT Enabled)	%	100%	100%	Total 44 online assessment and 43 onsite sustainability assessment conducted	CDMM (AD+FD), AFS Sustainability	
Onsite Assessment	Nos.	AD - 25   FD - 10	AD - 50   FD - 20	assessment conducted		
REDUCTION IN PACKAGING WASTE		AD FD	AD FD	AD FD	AD DOM COM	
Corrugated Box Waste	Kg /eq veh	5% 8%	10% 16%	17% 39%	AD DCM SCM / FD SCM / SSU, AFS Sustainability	
Wood Waste		5% 13%	26% 75%	15% 62%	Ars Sustainability	
SUSTAINABILITY BALANCE SCORE CARD (BSC)	Nos.	No. of suppliers AD - 30   FD - 20	No. of suppliers AD - 40   FD - 30	Sustainability BSC AD - 42   FD - 22	AD FD SCM/ AFS Sustainability	

## SUSTAINABILITY ROADMAP 2019 | STAKEHOLDER (DEALERS) FARM DIVISION

Commitment	F16 (Roadmap)	2016-17	F18 Target (2017-18)	Status F18	Responsibilities*
SUSTAINABILITY AWARENESS TRAINING webinar/CDs/link	New Initiative	Training to identified dealers	Refresher training to identified dealers	228 Dealers trained throughs CDs     2 webinars conduted by Channel Development team	
SUSTAINABILITY ASSESSMENT THROUGH DSQI	Inclusion of Sustainability Assessment Criteria in DSQI	Assessment, sustainability score baseline & targets F19	As per plan	Assessments completed for 577 DSQI dealers; score and baseline available	
SUSTAINABILITY IMPROVEMENT AT DEALERS	New Initiative	Pilot to be started with dealers (2)	5	<ul> <li>LED initiatives with dealerships and assessed in DSQI.</li> <li>Rain water harvesting, energy efficiency and safety parameters are included</li> </ul>	Customer Care
GREEN WORKSHOP AWARD	New Initiative	Criteria finalisation	Assessment & Decl. of Green dealers	<ul> <li>Green Dealership Assessments will be done by DSQI.</li> <li>Top 3 scoring dealers will be awarded in the month of July in Panchratna</li> </ul>	

\* AFS Sustainability team will facilitate

## SUSTAINABILITY ROADMAP 2019 | PLANET (MANUFACTURING) FOR SWARAJ DIVISION

Commitment	Metrics	2016-17	F18 Target (2017-18)	Status F18			
CARBON FOOTPRINT REDUCTION*	MTCO <sub>2</sub> /Tractor	8%	16%	13%			
Carbon Footprint Mitigation through Energy Management							
<ul> <li>Reduction in Specific Electrical Energy Consumption</li> </ul>	KWh/Tractor	5% <f16< td=""><td>10%<f16< td=""><td>12%</td></f16<></td></f16<>	10% <f16< td=""><td>12%</td></f16<>	12%			
<ul> <li>Reduction in Specific Thermal Energy Consumption</li> </ul>	Mkcal/Tractor	3% <f16< td=""><td>6%<f16< td=""><td>-7%</td></f16<></td></f16<>	6% <f16< td=""><td>-7%</td></f16<>	-7%			
<ul><li>% Renewable (Wind/Solar) Cumulative</li></ul>	%	0%	1.2%	0			
Specific Water Consumption Reduction*	KL/Tractor	8% <f16< td=""><td>16%<f16< td=""><td>47%</td></f16<></td></f16<>	16% <f16< td=""><td>47%</td></f16<>	47%			
Carbon Footprint Mitigation through Waste Management		·					
Hazardous Waste to Landfill	% reduction	Devising Strategy	25% <f16< td=""><td>39%<f16< td=""></f16<></td></f16<>	39% <f16< td=""></f16<>			
Non-Hazardous Waste - Reduce & Recycle	Kg/Eq Tractor	3% <f16< td=""><td>6%<f16< td=""><td>40%<f16< td=""></f16<></td></f16<></td></f16<>	6% <f16< td=""><td>40%<f16< td=""></f16<></td></f16<>	40% <f16< td=""></f16<>			
Specific Paper Consumption Reduction	Kg/Eq Tractor	15% <f16< td=""><td>30%<f16< td=""><td>38%<f16< td=""></f16<></td></f16<></td></f16<>	30% <f16< td=""><td>38%<f16< td=""></f16<></td></f16<>	38% <f16< td=""></f16<>			
Injury Reduction	% reduction	30% YOY	30% YOY	19.5% <f17< td=""></f17<>			

## SUSTAINABILITY ROADMAP 2019 | EMPLOYEES & COMMUNITY - AFS

Commitment	иом	2016-17	F18 Target (2017-18)	Status F18	Responsibilities*
A ENGAGING STAKEHOLDERS	S IN SUSTAINABILI	TY DRIVE			
LEADERSHIP IN SUSTAINABILITY - MCARES SCORE	% of improvement	4.26	4.28	4.31	Capability Building
SUSTAINABILITY REFRESHER & HUMAN RIGHTS TRAINING TO ASSOCIATES	%	50% coverage (0.5 man-days/ person/year)	100% coverage (cum.)	100%	Sector & Plant ER/Plant Sustainability Champion
MAKING SUSTAINABILITY PERSONAL	No. of stakeholders	Devising strategy & action plan for initiatives	0.5 Lacs	0.6 lacs	
EMPLOYEE WELLNESS					
IMPROVEMENT IN HEALTH INDEX OF EMPLOYEE	% of improvement	10% above 45 years of age employees	10% above 30 years of age employees	43% employees 30 years & above showing health index improvement	ОНС
GREEN BUILDING CERTIFICATION	Nos.	Conversion of existing AD building @ Igatpuri, Kandivali	AD Zaheerabad & FD Nagpur, MVML Green Co.	FD Nagpur has been certified as Platinum rated Green Building  AD Zaheerabad budget approved, project implementation started  MVML - In final phase of completion	ADMIN
B ENGAGING COMMUNITY I	N SUSTAINABILITY	DRIVE			
SOCIAL RESPONSIBILITY					
TREE PLANTATION	No. of Trees	0.5 Lacs	1.3 Lacs	1.5 Lacs	CSR
RENEWABLE (SOLAR/WIND) + VILLAGE ELECTRIFICATION (CUM.)	MW	15 KW	30 KW	37 KW	CSR



## SUSTAINABILITY ROADMAP 2019 | MANUFACTURING - AD

Commitment	Metrics	2016-17	<b>F18 Target</b> (2017-18)	Status F18	Responsibiliti
CARBON FOOTPRINT REDUCTION*	MTCO <sub>2</sub>	17%	18%	18%	
Carbon Footprint Mitigation through Energy Management					
<ul> <li>Reduction in Specific Electrical Energy Consumption</li> </ul>	KWh/Eq Veh	3% <f16< td=""><td>6%<f16< td=""><td>18%<f16< td=""><td></td></f16<></td></f16<></td></f16<>	6% <f16< td=""><td>18%<f16< td=""><td></td></f16<></td></f16<>	18% <f16< td=""><td></td></f16<>	
<ul> <li>Reduction in Specific Thermal Energy Consumption</li> </ul>	Mkcal/Eq Veh	3% <f16< td=""><td>6%<f16< td=""><td>18%<f16< td=""><td></td></f16<></td></f16<></td></f16<>	6% <f16< td=""><td>18%<f16< td=""><td></td></f16<></td></f16<>	18% <f16< td=""><td></td></f16<>	
<ul> <li>% Renewable (Wind/Solar) Cumulative</li> </ul>	% CO <sub>2</sub> Mitigation	5.5%	6.5%	5.90%	
Specific Water Consumption Reduction*	KL/Eq Veh	9% <f16< td=""><td>18%<f16< td=""><td>26%<f16< td=""><td>Mfg Plants CMD / Plan Sustainabili</td></f16<></td></f16<></td></f16<>	18% <f16< td=""><td>26%<f16< td=""><td>Mfg Plants CMD / Plan Sustainabili</td></f16<></td></f16<>	26% <f16< td=""><td>Mfg Plants CMD / Plan Sustainabili</td></f16<>	Mfg Plants CMD / Plan Sustainabili
Carbon Footprint Mitigation through Waste Management					Champion/ AFS Sustainabili
<ul> <li>Specific Hazardous Waste - Reduce / Recycle</li> </ul>	% reduction	Devising Strategy	30% <f16< td=""><td>30%<f16< td=""><td></td></f16<></td></f16<>	30% <f16< td=""><td></td></f16<>	
<ul> <li>Absolute Non-Hazardous Waste - Reduce / Recycle (Carbon Strategy)</li> </ul>	% CO <sub>2</sub> Mitigation	8%	8%	26% <f16< td=""><td></td></f16<>	
<ul> <li>Specific Non-Hazardous Waste - Reduce / Reuse / Recycle</li> </ul>	2 % < F16	Devising Strategy	10% <f16< td=""><td>20%<f10< td=""><td></td></f10<></td></f16<>	20% <f10< td=""><td></td></f10<>	
Paper Consumption Reduction	KG	30% <f16< td=""><td>50%<f16< td=""><td>44%<f16< td=""><td></td></f16<></td></f16<></td></f16<>	50% <f16< td=""><td>44%<f16< td=""><td></td></f16<></td></f16<>	44% <f16< td=""><td></td></f16<>	
Injury Reduction	% reduction	20% YOY	30% YOY	49% <f16< td=""><td></td></f16<>	



## SUSTAINABILITY ROADMAP 2019 | PLANET (MANUFACTURING) FARM EQUIPMENT SECTOR

Commitment	Metrics	2016-17	F18 Target (2017-18)	Status F18	Responsibilities
CARBON FOOTPRINT REDUCTION*	MTCO <sub>2</sub>	10%	13%	15%	
Carbon Footprint Mitigation through Energy Management					
<ul> <li>Reduction in Specific Electrical Energy Consumption</li> </ul>	KWh/Eq Tractor	5% <f16< td=""><td>10%<f16< td=""><td>19%</td><td></td></f16<></td></f16<>	10% <f16< td=""><td>19%</td><td></td></f16<>	19%	
<ul> <li>Reduction in Specific Thermal Energy Consumption</li> </ul>	Mkcal/Eq Tractor	3% <f16< td=""><td>6%<f16< td=""><td>16%</td><td>Mfg Plants -</td></f16<></td></f16<>	6% <f16< td=""><td>16%</td><td>Mfg Plants -</td></f16<>	16%	Mfg Plants -
<ul> <li>% Renewable (Wind/Solar) Cumulative</li> </ul>	% Renewble	5%	6%	5%	CMD / Plant Sustainability Champion/ AFS Sustainability
Specific Water Consumption Reduction*	KL/Eq Tractor	8% <f16< td=""><td>21%<f16< td=""><td>30%</td><td>Sustamusmity</td></f16<></td></f16<>	21% <f16< td=""><td>30%</td><td>Sustamusmity</td></f16<>	30%	Sustamusmity
Carbon Footprint Mitigation through Waste Management					
<ul> <li>Hazardous Waste         Disposal to Landfill     </li> </ul>	% reduction	Devising Strategy	25% <f16< td=""><td>18%<f16< td=""><td></td></f16<></td></f16<>	18% <f16< td=""><td></td></f16<>	
Non-Hazardous Waste -     Reduce & Recycle	Kg/Eq Tractor	3% <f16< td=""><td>6%<f16< td=""><td>19%<f16< td=""><td></td></f16<></td></f16<></td></f16<>	6% <f16< td=""><td>19%<f16< td=""><td></td></f16<></td></f16<>	19% <f16< td=""><td></td></f16<>	
Paper Consumption Reduction	KGS	20% <f16< td=""><td>35%<f16< td=""><td>37%<f16< td=""><td>ADMIN/ Plant Admin/ AFS Sustainability</td></f16<></td></f16<></td></f16<>	35% <f16< td=""><td>37%<f16< td=""><td>ADMIN/ Plant Admin/ AFS Sustainability</td></f16<></td></f16<>	37% <f16< td=""><td>ADMIN/ Plant Admin/ AFS Sustainability</td></f16<>	ADMIN/ Plant Admin/ AFS Sustainability
Injury Reduction	% reduction	30% YOY	30% YOY	28%>F17	

## STAKEHOLDER ENGAGEMENT

At Mahindra & Mahindra, stakeholder engagement is an exercise to establish a personal connection with stakeholders and get real time feedback on their expectations from us. As value creation becomes a more dynamic and collaborative exercise, maintaining vibrant channels of communication is vital in shaping our strategies, executing our plans and enhancing our performance.

## Stakeholder Engagement Mechanisms

Our engagement mechanisms are often revised to keep up with the changing times and we develop relevant platforms most applicable to the stakeholders in question.

STAKEHOLDER GROUP	ENGAGEMENT CHANNELS
m	
Government/ Regulatory Authorities	Environmental Compliance, Policy Intervention
Employees	Conferences, workshops, publications, newsletters & reports, online portals, feedback surveys and one-to-one interactions, employee involvement in CSR activities
Customers	Interviews, personal visits, publications, mass media & digital communications, feedback camps, plant visits and support programmes
Suppliers & Dealers	Supplier & vendor meets, workshops & trainings, audits, policies, IT-enabled information sharing tools, and recognition platforms
Investors/ Shareholders	Annual report, sustainability report, press releases, investor presentations, corporate website, quarterly and annual results
Local Communities	CSR activities

## **Employees**

At M&M we are sensitive to the need of an ongoing lively employee engagement. The experience that our employees have at their workplace translates to the experience that our customers have with us. It is clear that good engagement initiatives infuse every project with purpose, energy and enthusiasm, which in turn improves attitude towards work in general, and productivity.

Our engagement mechanisms are geared to capture employee expectations and ambitions, which in turn provide us with insights on how to enhance growth and job satisfaction.

#### ANNUAL SUSTAINABILITY SUMMIT

The Annual M&M Sustainability Conference 'SUSTAIN 2017' was held in June at MITC, Kandivali by the Sustainability Team. Over 100 sustainability advocates across 19 locations were present. The Conference also held a panel discussion with the dialogue certred around the question "Is sustainability integral to commercial normality and competitiveness?"



A Sustainability Policy and Energy Policy for AD and FD sectors was inaugurated followed by the Sustainability Award ceremonies. The Summit also hosted various sessions on topics that included "Government Regulations- EESL Scheme", "Best practices in Ecosystem, External Companies & ITC", "Emerging Trends & Practices on Sustainable Supply Chain Management", "Water Management" and "Waste Management" which were conducted by experts from EESL, Cognito, ITC, ERM, N S Associates and the Birla Institute of Management Technology.

## OPEN FORUM

The half yearly open forum, Khula Manch, was organised at FD Kandivali Plant and at FD Nagpur Plant. The senior leadership team used the forum as an opportunity to highlight mid-year business results and also discuss future plans for the year.

Technical Collaboration,

Capacity Building,

Research

Educational

Universities

Institutes/

### Customers

The stronger the relationship of a business with its customers, the more sustainable is the business. To ensure that this mutual relationship continues to benefit each of us, we maintain a continuous engagement with our customers, listen to their desires, analyse their feedback and address their needs. Some of the key initiatives undertaken during the reporting period, to reinforce customer engagement include:

#### NEW DIGITAL ENGAGEMENT PLATFORMS

Mahindra & Mahindra recently launched two platforms- SyouV and With You Hamesha to open a new channel for direct dialogue with potential and existing customers. These new-age digital platforms engage with customers in two separate phases- 'SyouV' is a pre-purchase, one-stop solution platform for auto-enthusiasts, while 'With You Hamesha' offers a superior vehicle service experience for existing customers.



## MYAGRIGURU APP

'MyAgriGuru' is a mobile app that connects Indian farmers with agricultural experts across the country and empowers them with a rich database of information. This helps farmers make informed decisions throughout their farming process, and thereby increase their agricultural productivity and income. The peer-to-peer sharing app is open and visible to all users, creating a high degree of trust and transparency.

## Within the first year of its launch, this digital platform has helped connect over 3.8 lakh farmers and experts.



### **Local Communities**

Corporate citizenship and the well-being of local communities, go hand in hand. Local communities play hosts to business and it is the responsibility of business to integrate in the community and enrich it in a meaningful way. We have institutionalised mechanisms to engage with the community, share their aspirations, work together and continually strengthen relations.



For details please refer to the Social Performance section of the report

## Suppliers

Suppliers play a crucial role in fast-tracking our growth. Hence, we engage with them in various capacities to inculcate long-standing, symbiotic relationships.

To ensure a consistent and comprehensive approach across business units we have articulated the following policies:

### **Supplier Code of Conduct**

https://

supplier.mahindra.com/Pages/CodeOfConduct.aspx

Sustainable Green Supply Chain **Management and Procurement Policy** https://supplier.mahindra.com/Pages/sustainability.

Key supplier engagement initiatives taken up

### SUPPLIER SUSTAINABILITY MEET

The Igatpuri Plant organised the fifth edition of the 'Supplier Sustainability Meet' at the Pentwyn Club. The meeting revolved around the importance of sustainability as a way of life and in the realm of business specifically. By presenting the sustainability journey of the Igatpuri plant, speakers urged supplier partners to embark on similar journeys.

The event saw the participation of 32 Suppliers, while 20 of them presented their initiatives on sustainability.



#### SUPPLIERS' MEET

The Farm Division SCPC organised a Supplier Meet for Mumbai based suppliers in February at MITC, Kandivali.

The event touched upon various topics regarding business, ranging from the Tractor Industry outlook for FY19, priorities for the Mumbai Hub with regard to Suppliers such as 100% recyclable packaging, and a demo of the digitisation of Zaheerabad plant.





### **Dealers**

Distributors and Dealers are the face of the company, and vital allies in enabling us to deliver true value to customers. They set expectations for our products and provide pre and post sales service to build brand preference and loyalty. They also act as our ear to the ground and provide us insights on the moods and needs of customers and details of competitive offerings.

### NADA AUTO SHOW 2017, NEPAL

At this year's NADA Auto Show, M&M showcased the complete mobility range in partnership with our distributors in Nepal – from 2 wheelers and personal vehicles to small, medium and heavy commercial vehicles, buses and a range of construction equipment. The showstopper and real crowd puller, however, was the Mahindra Thar Daybreak edition, showcased for the first time in Nepal.

The event garnered over 1,500 enquiries and a little over 100 bookings across its product categories.







## **Online Footprint**

In this digital age, the internet has profoundly altered the way we do business whether it's through a website, an e-commerce platform, a social media page or a combination of all three.

Engaging with customers and potential customers online is imperative to building and sustaining healthy relationships and brand narrative.



## DRIVEN BY OUR PEOPLE



The success of an organisation is directly proportional to the proper management of its people and care for their motivation and well-being. People being the greatest asset of an organisation, are essential to its strategic performance.

We see our people as one of the key drivers of our organisational success, shaping our future with their talent, skills, attributes and knowledge. They are an essential building block in our efforts to create and deliver value for our stakeholders, thus, enabling us to Rise for Good.

Our aim is to make Mahindra one of the 50 most admired global brands by 2021; one that empowers people to RISE to their dreams and achieve their full potential.

## **OUR VISION**

Our goal is to be one of the top 50 most admired global brands by 2021. To that end, we make conscious efforts to put in place practices and policies that nurture talent, foster stronger bonds and raise up future leaders across our businesses.

Our two-tier HR management approach, one at the Group level and the other at the Business level, enables us to align Business level HR policies with Group level HR goals and undertake bespoke employee engagement initiatives at all units.

## The Mahindra Employee Value Proposition

## **ENABLING TRANSFORMATION**

## **ENSURING GROWTH**



### Challenge Conventions

Growth at Mahindra has been a function of challenging the norms and finding opportunities in obstacles. We motivate our people to question the status quo and see positives in the negatives.

#### Bring Alternative Thinking to the Workplace

Ability to think out of the box and see beyond what is visible enables innovations and helps problem solving. Alternative thinking is embedded in our DNA and catalyses our breakthroughs.

#### **Drive Positive** Change in the Lives of Our Customers & **Communities**

Fostering inclusive development is at the heart of everything we do at Mahindra. While we ensure that our people progress with us, we also expect our employees to contribute in creating meaningful impacts in the communities we

### Recognition for Outperformance

Appreciation is the best form of motivation. So, when our employees deliver their best, we recognise and reward their path-breaking performances and exceptional endeavours. This not only fosters healthy competition but also ensures a culture of excellence



### **Empowering Environment**

At Mahindra, we stimulate commitment and ownership by encouraging people to make their own decisions. This nurtures a proactive working ethos which enables employees to take charge.

#### **Abundant Learning Opportunities**

Constant learning is the key to growth and development. At Mahindra, we continually provide ample learning opportunities at every level across our workforce, to enrich our Human Capital.

## MANAGEMENT APPROACH

At Mahindra, we do not transform people; they transform themselves as a result of the empowering work culture that we nurture across all our sectors and units.

Our Employee Value Proposition of CAPable People, REAL Experience pursues effective people-centric strategies that accelerate inclusive growth and grant momentum to collaborative success.

## **Labour Practices**

Mahindra does not encourage or tolerate any kind of discrimination. We are an equal opportunity employer and are steadfast in conforming to the labour standards and ensuring the health and safety of our workforce. Consequently, all units of the Automotive Division (AD) have been certified with OHSAS.

As the first Indian company to sign the United Nations Global Compact (UNGC) in 2001, we are committed to function in accordance with its principles on labour standards.

Principle 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

Principle 4 The elimination of all forms of forced and compulsory labour

Principle 5 The effective abolition of child

Principle 6 The elimination of discrimination in respect of employment and occupation

The Mahindra 'Corporate HR Cell' continually monitors the policy trends, aligns our initiatives to industry best practices, and trains our people to adopt the current best practice benchmarks.

We have incorporated the following International Labour Organisation's labour conventions into our policies since 2009:

- Freedom of association and the right to collective bargaining
- · Right to organise and collective bargaining convention
- Forced labour convention
- Abolition of forced labour convention
- Minimum age convention
- Worst forms of child labour convention
- Equal remuneration convention
- Discrimination (Employment and Occupation) convention

## **Human Rights**

Violation of human rights is unacceptable at Mahindra. We strictly adhere to our values of equality and dignity for all and strongly condemn any act of discrimination, forced

and compulsory labour and child labour within and beyond our walls.

All forms of corruption, including bribery or other negative practices are prohibited. We observe the following UNGC principles on human rights:





HUMAN RIGHTS **ABUSES** 



AGAINST **EXTORTION** 

## DIVERSITY & INCLUSION

Diversity is gaining prominence primarily because it not only fosters uniqueness but also engenders diversity of thinking in all facets of life.

At Mahindra, diversity and inclusion is an organisational effort, cascading it down to every unit and department. As part of our goal to be among the top 50 most admired global brands, we have laid the foundation for inclusion at the deepest level and in its true sense.



We ensure our people know how crucial they are to the organisation's success, regardless of their gender, race, religion, ethnicity, or disabilities, and how they fit into the grand scheme of things.

#### **Policies**

Our D&I agenda and policies focus on building a workplace with equal opportunity for all to develop and grow in a safe and harassment free work environment. Empowering the people by valuing the uniqueness they bring to the table is what will enable us to Rise for Good together.

Understanding the significance of diversity, the Mahindra Group formed the Group Diversity Council in November 2012, under the chairmanship of Anita Arjundas, President- Real Estate Sector & Member of the Group Executive Board, Mahindra Group.

When we started our journey, the gender diversity was 16%. Currently we have 26% women at entry level. Women at both the mid and senior leadership level are 7% each.

To foster the agenda of diversity, the Group Diversity Council formulated the group diversity vision and instituted sector diversity councils at every business level.

Diversity amongst others requires an ecosystem and a framework. Our D&I framework consists of the following:

- Leadership Commitment
- Diverse Workforce
- Inclusion Initiatives
- Achievement & Communication
- Evaluation

We collaborated with Avtaar group to roll out diversity and inclusion sensitisation drive to make all the employees and key influencers aware about the importance of diversity and the presence of subconscious biases within us which impact our decision making.

## GENDER DIVERSITY

## **WOMEN AT WORK**

When there is greater diversity in the workforce, there is better innovation, higher productivity, and better business. At Mahindra we believe, women are major contributors to decision making at home, and we need to bring the same to organisations as well

Talent is gender neutral, hence, we need to create affirmative plans that provide equal opportunities and facilitate career growth

We encourage the women in our workforce by providing them with a safe and inclusive environment, and opportunities that leverage their talent. Given below are some of the policies and initiatives taken in this regard.

### **Policies**

### PREVENTION OF SEXUAL HARASSMENT AT WORKPLACE

The Company views all incidents of sexual harassment seriously and follows a zero tolerance approach towards any act of sexual harassment. All incidents of sexual harassment are prohibited and any complaint is investigated and if proved, appropriate action is taken against the offending person.

At all the locations and offices of the Company, an Internal Complaints Committee is constituted. The constitution of the committee is as per the provisions of the Prevention of Sexual Harassment of Women at Workplace Act.

In case of complaints, we provide a choice to the complainant to have a one-on-one discussion with an ICC member of their choice to guide them through the entire process.

We have an e-learning module on POSH, which all the employees have to complete every year as refresher. We also strongly

communicate our philosophy through campaigns and workshops. The Company has in place an Anti-Sexual Harassment Policy in line with the requirements of The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. Internal Complaints Committee (ICC) has been set up to redress complaints received regarding sexual harassment. All employees (permanent, contractual, temporary, trainees) are covered under this Policy. The Policy is gender neutral. During the year under review, 1 complaint with allegations of sexual harassment was filed, which was disposed-off as per the provisions of The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and as of 31st March, 2018, no complaint was pending.

#### SAFETY

In metro cities we have tie-ups with cab service providers for women employees who travel or stay late at work. We also provide accommodation facility which is in premium and safe hotels or the company's guest houses

The reporting manager ensures that the women have the required support in case they have to travel to unsafe locations, like having a male member accompany them or use technology to connect, rather than face-to-face meetings.

#### MATERNITY BENEFIT

We believe in providing support through our policies to help our women professionals during this important phase of their lives. Below mentioned are the exclusive benefits provided to women apart from the statutory maternity benefits.

- Cab travel reimbursement for comfortable travel to and from the office during the last two months before the expected date of delivery.
- Women employees can avail part-time employment option for 6 months after their maternity leave. As part of the policy they can work either minimum 12 days in a month or minimum 27 hours in a week, and compensation is on pro rata basis.

## Initiatives

### SECOND CAREER INTERNSHIP & FULL-TIME EMPLOYMENT PROGRAMMES

The programme was launched by the Company to help relaunch the career of women planning to return to work after a break.

As part of this initiative, Only Women Call Centre was set up in Delhi in 2007 to meet the business requirement of Mahindra First Choice Wheels, an aftermarket car business. What started off with 2 women, now has 61 women working at the call centre.

This year, we recruited 24 undergraduates, 10 women who speak regional languages, and 6 women joining after their sabbatical.

The team is responsible for interacting with customers, enhancing brand image, generating leads and improving customer satisfaction.

#### • WOMEN ENGINEERS & TECHNICIANS IN MANUFACTURING

Breaking the myth that only men can work in core manufacturing due to the use of heavy machinery, we have hired a number of women on the shop floor in the automotive business, steel and inter-trade. At a time when women employees working on the shop floor was not common, we successfully challenged the mindset and currently have more than 100 women employees in manufacturing.



The goal is to increase gender diversity ratio to 20% in Graduate Engineer Trainee category and 30% in Graduate Apprentice Trainee Category by implementing out-of-the-box strategies and changing the methodology.

The various campus initiatives undertaken by the Company are aimed at driving the Rise brand and increasing awareness of opportunities for women in manufacturing and AFS. A total of five top women's colleges were included in the programme and an informative sensitisation communication outlay was conducted to attract the right talent fit. The specialisation band was increased and few other branches apart from mechanical were added.

Close to 100 women were hired and placed across AFS in the year 2017 through this programme.

At SD, we currently have 69 women employees working in core tractor manufacturing, which is a 65% increase in FY 2017-18.

This initiative of the Swaraj Division of changing paradigm on the shop floor was recognised by the leading English daily newspaper Tribune, on the occasion of Women's Day.

#### WOMEN LEADERS PROGRAMME

A study of 42 companies by Catalyst in India revealed that a gender gap exists at all levels of the pipeline for women, and widens as women move towards senior management/CEO roles, indicating a disconnect between current strategies and women's inclusion. The same held true for Mahindra Group. Hence, we launched the Women Leaders Programme to plug in the gaps.

SP Jain Institute of Management & Research, Mumbai, one of India's leading business schools, with a focus on women's career management, partnered with Mahindra Leadership University to design and execute the programme. In our endeavour to make the programme a

contemporary and holistic learning journey, we included the following activities:

- Group coaching to facilitate the group to reflect and reinvent their approach and aid in team development to bring in synergy.
- Participants identified one problem area from their roles and applied the principles of design thinking for problem solving.
- Sessions focused on science and psychology of risk taking, which were then integrated into live business simulation to demonstrate risk taking in decision making.
- A triangulated report of psychometric assessments- Harrison Assessments, Rise 360 Feedback and FIRO Business- was created.
- Interaction with leaders from within/outside the Group to imbibe from their stories.

The first batch of the programme graduated on February 23, 2018 and received their certificate from Mr. Anand Mahindra, while the second batch of this annual programme has commenced.

#### WOMEN'S DAY CELEBRATION

The women employees of MVML, MHEL, MLL and MTBD (Pune Chapter) came together, to celebrate womanhood. In this action packed half day event Ms. Rama Malik, VP-Mahindra Logistics, explained the peer learning approach for women to succeed at the workplace. Mr. Shashank Raodeo, Sr. GM-SCM, MVML, appealed to the women to dream big and advised them to never sacrifice their ambitions.

A four-hour training session, Mukti, was conducted for women associates on the shop-floor, where they were taught about self-image, mental and physical well-being through various exercises.

The event also saw the launch of MWOW-Mahindra World of Women, a peer networking platform.



## TRAINING & DEVELOPMENT

Robust training and development programmes help organisations in retaining the right talent by honing their specific skills and focusing on their growth and future performance. At Mahindra our programmes are adept at nurturing every employee, across all hierarchies. With our high impact training and expansive development programmes we aim to engage and develop the organisation's talent right from the time they are onboarded, continuing through the entire employee life-cycle.

Doing so helps increase employee motivation, improve their competency and productivity and create deeper talent succession pipelines. **Our initiatives are based on the 3E Framework - Education, Exposure and Experience.** Given below are the initiatives and programmes undertaken in the reporting period.

### INTRODUCTION TO ISO27001:2013 STANDARD FOR INFORMATION SECURITY MANAGEMENT

A new initiative has been taken up in the history of Op-Suraksha Information Security in co-ordination with Mahindra Leadership University (MLU). Training sessions are conducted on ISO27001:2013 Information Security Management Standard, and successful participants are awarded certificate from MLU. ISO27001:2013 specifies requirements for establishing, implementing, maintaining and continually improving an information security management system for any organisation, regardless of type or size.



MIQ in collaboration with MLU IT Academy conducted an Internet of Things programme where the guest speaker, Virendra Chaudhari from Microsoft, gave an insightful talk on IoT applications and trends.

With IoT becoming a topic of increasing importance inside and outside the workplace, this workshop aims to provide insights that will impact various functions like manufacturing, quality, maintenance, procurement, product development, etc.

This will help facilitate understanding of related concepts, enabling participants to work on a roadmap to be future ready.

Other eminent faculty for this programme were Vasudev Navak (IoT practice Lead),



Five batches have been conducted so far of 8 hours each. 81 participants attended the training programme at two locations, three in MITC Kandivali and two in MRV Chennai.



Kunal Pachnanda (Director- Value Engineering) and Ayush Jha (Advanced Analytics- SME) from Bristlecone. Bishwanath Ghosh, CIO- Corporate and Chairman of the IT Academy spoke about the growing importance of IoT within Mahindra Group.

23 participants from AD, FD, SD, MRV, and Mahindra Partners attended the programme.

## ■ EMPLOYEE ENGAGEMENT

For us, at Mahindra, our job does not end with attracting the right talent. It is also crucial for the organisation's success that employees are given opportunities to maximise their talent and know the role they play in our growth. Hence, we formulate strategies and create opportunities focussed on increasing employee engagement that enhance their performance and productivity, which directly impacts the Group's growth and success. When employees are engaged on physical, emotional and cognitive levels, they invest significantly in achieving positive outcomes for themselves and the organisation.



Given below is a snapshot of the various engagement activities conducted during the reporting year.

## EMPLOYEE ADVOCACY PROGRAMME

Brand advocacy helps in creating the right bond with our various stakeholders along with actively sharing our organisation's culture, products and services. Advocacy also helps in building relationships in the digital world and creates a sense of pride and belonging within our employees.

The number of social media users is expected to increase to 3.02 billion by 2021. As a business with presence in most continents, we have realised the potential of social media in spreading the philosophy of RISE in India and globally.

To leverage this potential, we have created M-Advocates, who are passionate employees across the Group. The M-Advocates share content related to Mahindra on their personal social media profiles, thus, creating a multiplier effect in taking forward the brand's philosophy.

This initiative has been active for 15 months with 400 M-Advocates who have been able to garner over 22 million impressions on social media, over 400,000 engagements and have created 1,500 pieces of content showcasing various aspects of Mahindra.

As we continue to leverage the power of social media in raising awareness about our brand and enhance employee engagement, we aim to achieve the following targets:

- One billion impressions by 2022
- 10,000 M-Advocates expected to become ambassadors of Brand Mahindra by 2025 or earlier



#### WORK-LIFE BALANCE

We believe the performance of our employees within the organisation is affected not just by the internal factors but also the external factors. One of the major external factors that impact their performance positively or negatively is their personal responsibilities.

When employees are able to strike a healthy balance between their personal and professional commitments, it gives them a sense of calm and enables them to concentrate fully on their workplace commitments. To this end, we have undertaken activities and initiated policies that motivate our employees and lead to enhanced productivity.

#### LEAVE POLICY

We have a flexi-time policy, wherein employees have the flexibility of an hour and 15 minutes to regular office timings. This is a much appreciated policy and helps in managing their personal priorities.

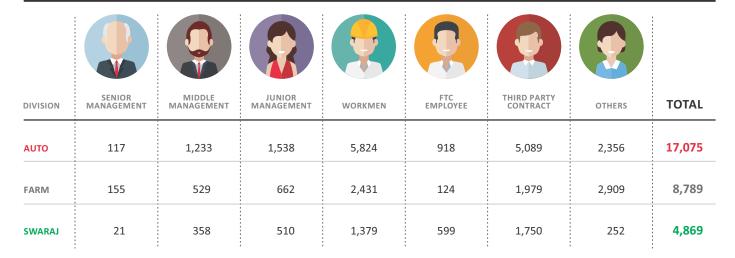
We also provide 44 days of leave which include paid leave, exigency leave and mandatory leave.

We offer 3 days of work-from-home facility in a month for women with children below three years and 2 days for women with children between 3 to 18 years of age.

This policy is also applicable to men, 3 months prior and 3 months post the birth of a child.

## WORKFORCE SNAPSHOT

Total Employee by Type in nos.



	1		C	

	SENIOR MANAGEMENT	MIDDLE MANAGEMENT	JUNIOR MANAGEMENT	WORKMEN	FTC EMPLOYEE	THIRD PARTY CONTRACT	OTHERS	TOTAL
AUTO DIVISION	6	80	133	7	7	62	37	332
FARM DIVISION	4	32	46	2	4	30	75	193
SWARAJ DIVISION	0	7	22	32	9	5	39	114
AUTO DIVISION	111	1,153	1,405	5,817	911	5,027	2,319	16,743
 FARM DIVISION	151	497	616	2,429	120	1,949	2,834	8,596
SWARAJ DIVISION	21	351	488	1,347	599	1,750	252	4,808

## **New Hires Joining**

in nos.

NOW	HIPAC	Leaving
INCV	111163	LEAVIIIE

in nos.

AGE	AUTO DIVISION	FARM & SWARAJ DIVISION
<30	97	1,811   132
30-50	24	7   32
>50	5	0   1

AGE	AUTO DIVISION	FARM & SWARAJ DIVISION
<30	1	253   23
30-50	2	133   5
>50	3	0   0

## **Average Training Hours**

in hours

	DIVISION		SENIOR MANAGEMENT	MIDDLE MANAGEMENT	JUNIOR MANAGEMENT	WORKMEN	FTC EMPLOYEE	THIRD PARTY CONTRACT	OTHERS
		MALE	4.6	17.1	30.2	1.1	0.003	1.3	4.6
	AUTO	FEMALE	8.2	5.2	19.3	2.3	0.0	0.0	2.6
		TOTAL	12.8	22.3	49.5	3.4	0.003	1.3	7.1
FARM		MALE	3.61	15.19	32.45	0.05	0.19	0.01	0.05
	FARM	FEMALE	0.02	5.10	12.36	0.00	0.02	0.00	0.35
	TOTAL	3.63	20.29	44.81	0.05	0.21	0.01	0.40	
SWARAJ		MALE	0.86	2.86	3.87	1.45	-	-	-
	SWARAJ	FEMALE	0.00	2.00	3.59	1.14	-	-	-
	TOTAL	0.86	4.86	7.46	2.59	-	-	-	

## SAFETY DASHBOARD



## **Permanent Employees**

in nos.

SECTOR	LOST TIME INJURY RATE			LOST DAY RATE			FATALITY
SECTOR	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	FAIALITT
FD + SD	0.09	0	0.09	0.04	0	0.04	0

## **Contract + Other Employees**

in nos.

							,,,,,,
FD + SD	0.34	0	0.34	1.69	0	1.69	0

## PRODUCT PERFORMANCE



## MANAGEMENT APPROACH

A company is known by the products it keeps. Quality products help maintain customer satisfaction and loyalty, build trust and repeat purchase. At Mahindra, we look at product responsibility across the stakeholder spectrum and not just the customer.

It is our endeavour to ensure that our products not only deliver great economic value but also deliver on societal and environmental needs. For example, our products comply with emission norms as prescribed by the government and we consistently keep adding technologies and environment-friendly features which go beyond the demands of laws.

We also invest in communication to educate the customer on the benefits of these features and along with creating product preference, motivate them to participate in the larger good by investing in these products. 'Make in India' has been our credo since long and in line with the nation's requirement, we are committed to enhancing our efforts further. With Futurise, we are upping the ante on technology and innovation to compete with the best in the world.

There are many 'Indias' in one India. When the language changes every 10 kilometres and multiple cultures coexist, customer segmentation is tough. The most striking differentiation that can be done is rural and urban. Economically, the villagers are more agri-based, while the cities are more focused on manufacture and service industry. Both are different like chalk and cheese but need each other to sustain. On one count though, they are similar- they both require products for mobility and convenience.

Our transformation into a global innovation powerhouse is rooted in three guiding principles:







## In FY18 5,48,508

3,17,531

tractors were manufactured and sold from our 15 facilities

## NEW TECHNOLOGIES

## Electrical & Electronics - Comfort & Convenience Technologies

- Steering Wheel Controls Cruise & Audio
- Static Bending Lamp
- Logo Projection Lamp
- Tyre Pressure Monitoring System-TPMS
- Light Sensing Headlamps
- IntelliParkwith Dynamic Guide
- Rain-Sensing Wipers

## Electrical & Electronics - Infotainment Technologies

- DVD/USB/iPod/BT Music
- Power Up Animation Make Calls...
- Vehicle Alerts DVD/USB Video
- Reverse Park Vehicle Info
- Voice Recognition Tyre Pressure

#### Connected Vehicle Technology

- Connected Apps Ecosense
- Emergency Call Android Auto
- Apple Carplay Smart Watch Controls
- Digisense

## **Green Technologies**

- Hybrid Electric Propulsion
- Micro-Hybrid Start/Stop
- IntelliHybrid
- Hydrogen Propulsion (Leader in India)

## **Tractor Technologies**

- Stylish SMC Hood and Lamps
- Tilt Steering for better ergonomics and comfort
- PST & Wet PTO for fatigue-free operation
- CRDe for drivability and fuel economy
- Futuristic Cabin for MUSA for comfort and protection
- DiGiSENSE for geo-fencing, live tracking of data
- Creeper

## ENVIRONMENTAL

At Mahindra, environmental challenges are seen as an opportunity to upgrade our product and be the first in class and stay ahead of the competition.

## Spearheading Sustainable Mobility

Our name is synonymous with utility vehicles in India. In 1947, we introduced utility vehicles to India and since then, have pioneered a range of mobility products and solutions. It includes SUVs, electric vehicles, pickups, commercial vehicles, tractors and farm equipment, which are tough, rugged, reliable, environment-friendly and fuel-efficient.

The rigorous 5C test is the testimony of our vision for the future of mobility, and each product, existing or new, must pass through it:



Under our 'Sustainable Mobility Solution' initiative, we are focusing on the following features in our product development journey.



Improve Fuel Efficiency



Reduction of Engine Emission



Alternate & Renewable Fuels



Recyclable Material

It includes the umbrella brand Mahindra Electric-rebranded from Mahindra's electric mobility portfolio- under which we manufacture electric cars, license out our electric vehicle technologies, electrify our new and existing platforms, and help deliver integrated zero-emissions mobility solutions.

We are building a network of global facilities including R&D to put the power of sustainable mobility into the hands of more and more people, and our engineers in India, the US, South Korea and Italy, are working to turn these mobility solutions into reality.

## Life Cycle Assessment Approach

Improving the performance and durability of a vehicle is important, but equally important if not more, is reducing the environmental footprint. The approach has to be consistent and cohesive across each stage of the product's lifecycle, viz.:

#### **DESIGN & PRODUCT DEVELOPMENT**

## RAW MATERIAL EXTRACTION & INTERMEDIATE PROCESS

#### **PRODUCTION ASSEMBLY & LOGISTICS**

#### **CONSUMPTION & UTILISATION**

### **DISPOSAL & ELV**

Life Cycle Assessment (LCA) is a tool that compiles the comprehensive data of relevant material and energy inputs, and potential effects to make an informed decision regarding the best solution w.r.t. products and their environmental impacts. Below are the details of LCAs undertaken during the reporting period:

Life Cycle Assessment Approach	Description of Assessment Approach		
Full LCAs	We commissioned and completed full LCA of UV pickup model BMT. We have further taken steps to reduce the impacts based on the study results, using weight reduction potentia and its associated benefits for the load carrier.		
Simplified LCAs	Simplified LCA was done in the form of compliance with ELV directive for European M1 & N1 products. The vehicles were exported and		

# Other externally recognised tools

(e.g. material flow accounting, ecological footprinting, MIPS) Simplified LCA was done in the form of compliance with ELV directive for European M1 & N1 products. The vehicles were exported and certified as per EEC directive 2005/64/EC.

certified as per EEC

directive 2005/64/EC.

## **New Developments**

## **AUTO DIVISION**

#### **JEETO MINIVAN**

We launched the Jeeto Minivan, a stylish and comfortable passenger carrier developed on the successful Jeeto platform.

The Jeeto Minivan is best suited for urban and semi-urban modes of transportation and will cater to last mile connectivity, contract and stage carriage use for tour/ travel purposes and intra-city people movement redefining Last Mile Transportation.



#### E-ALFA MINI ELECTRIC RICKSHAW

We are one of the pioneers of electric vehicle technology in India and our current range of products in this segment include the e2oPlus, the eVerito and the eSupro. Joining this list is e-Alfa Mini, expanding Mahindra's range of electric vehicles in the country that can reach out to an entire spectrum of consumers across segments in both people and goods movement.

Introduced in September 2017, with a driver+4 seating capacity, charging the e-Alfa Mini is as simple as charging a mobile phone. On a full charge, the Mahindra e-Alfa Mini can travel for up to 85 km in standard conditions and can achieve a top speed of 25 kmph.

## It is a complete 3-wheeler with zero emission, specifically designed for pollution-free last mile connectivity.

#### **DISTINCTIVE LOOKS**

The e-Alfa Mini sports a distinctive and contemporary exterior with a dual headlamp for better visibility. It has an overall robust build, a compact superstructure with a stylish canopy, an attractive car-like instrument panel, black dashboard and mudguard, and black and red dual tone interiors.

## SPECIFICALLY DESIGNED FOR INDIAN CONDITIONS

Specifically designed for Indian consumers and road conditions, the e-Alfa Mini has been tested extensively over 1 lakh km in real road conditions. It is also an all-season vehicle with a waterproof canopy.

#### SUPERIOR COMFORT

The e-Alfa Mini boasts of a large cabin space with ample passenger space, headroom, legroom and shoulder room as compared to its competitors in the segment. This allows easy ingress. It has comfortable driver and passenger seats as well, ensuring ultimate comfort.

## **MAHINDRA TRUST**

The e-Alfa Mini comes with the larger Mahindra Trust which guarantees ultimate peace of mind for customers. To add to this, it is aptly supported by Mahindra's widespread sales and service network that facilitates easy repair and service.



#### MAHINDRA'S TOUGH AND RUGGED DNA

It sports the tough and rugged Mahindra DNA, making it suitable for all types of terrain. With a strong suspension, a robust body and best-inclass chassis, the e-Alfa Mini is a winner all the way with better strength and load carrying capacity. It also boasts of a superior ride and handling experience as compared to the competition.

## MILEAGE & POWER ✓ OTHER KEY FEATURES 120 mAh Battery with a mileage • Best-in-class product perf

120 mAh Battery with a mileage of 85 km per charge in standard conditions, and a powerful motor and controller; making it a better proposition compared to competitors.

- Best-in-class product performance for higher earn-ability
- 60-minutes fast service guarantee
- Low down payment and attractive EMI
- Best-in-class 2 years vehicle warranty
- Industry first one free battery replacement\*

\*Available with select finance options

As the pioneer of electric vehicles and integrated mobility solutions in India, it has always been our endeavour to make electric vehicles more accessible and best suited for Indian conditions. The launch of the e-Alfa Mini is yet another step to provide an emission-free, green mode of safe intracity transportation in the country. At Mahindra, we are aligned to the Government's vision to become a 100% EV nation by 2030. True to the spirit of 'Make-in-India', we shall be at the forefront to lead this change along with the Government.

#### Rajan Wadhera

President - Automotive Sector, Mahindra & Mahindra Ltd.

## **New Developments**

## **FARM DIVISION**

#### • FIRST-EVER DRIVERLESS TRACTOR IN INDIA

Developed at Mahindra Research Valley in Chennai, the Driverless Tractor technology is set to take farm mechanisation to new heights. With this launch, Mahindra becomes the pioneer in the Indian tractor industry with the unique proposition of a driverless tractor. This innovation will change the future of farming by increasing productivity, leading to increased food production to feed the growing needs of the world.

### TRAKSTAR

We launched a new brand Trakstar (its third tractor brand after Mahindra and Swaraj) from our subsidiary Gromax (erstwhile Mahindra Gujarat Tractors). The idea is to make the mechanisation affordable to more farmers by pricing it 5-10% lower than the industry average. It will focus on value seeking farmers and enable them to enhance their prosperity.

The new brand has been launched in five states through approximately 100 dealers. Introduced in the 30-50 hp category, Trakstar is suitable for farming and supplementary use, and would further enhance Mahindra's bouquet of products catering to different categories further boosting our increasing market share.



### SWARAJ 963 FE

Swaraj enters 60 hp segment with the launch of Swaraj 963 FE. Having 2,200 kg Sensilift Hydraulics, it has precision even with heavy implements. With Synchromesh Transmission, it has a wide speed range (0.5 to 32 kmph) and easy of shifting gears. The IPTO (Independent Power Transmission Operator) Clutch ensures driver comfort during PTO(Power Take-off) applications.



### MAHINDRA CROP CARE - TROMPH

The Crop Care Division of Mahindra Agri Solutions Ltd. introduced 'Tromph', a systemic insecticide for the control of BPH (Brown Planthopper) of Rice. The launch of Tromph marks the beginning of a new era for MASL's crop care business as it combines Japanese technology and Mahindra's trusted brand name



The launch witnessed the presence of 250 dealers, distributors and farmers in Punjab & Haryana, and approximately 400 dealers, distributors and farmers in Andhra Pradesh.

## MASL INTRODUCES HYBRID SEEDS

Mahindra Agri Solutions Ltd. launched an integrated marketing campaign to introduce the indigenous R&D product- the MM 2030 corn hybrid seed in Bihar and Telangana.

The offering is an advanced product from the Mahindra Genetic Research Centre. It has received an overwhelming response from farmers in the maize belts of India.



## INDIA'S 1ST AUTOMATED OIL DISPENSER MACHINE

NuPro PureAll, an automated oil dispenser machine, is Mahindra Agri Solutions Ltd.'s inhouse innovation

Offering the 'Promise of Purity', the machine addresses the perils of adulteration in the commodity purchase of edible oil. Currently, there are about 14 PureAll machines operational in West Bengal.

## MRV - Mahindra World City Biogas Project

We have always used Alternative Thinking to create sustainable solutions. In one such effort at MRV, we are using segregated food waste of 10 tons/day, provided by MWC to generate 400 kg of CNG grade fuel produced daily, which can propel our tourist buses to 2800 km/day.

Along with that, we also generate 4 tons of organic manure daily. Two such commercial projects are under implementation.







## ENABLING Infrastructure

The infrastructure at Mahindra enables a stream of products that can be broadly classified into mobility vehicles (passenger as well as commercial) and farm equipment. Every product in both these categories, not only takes care of the comfort, safety, affordability and quality aspects, but also keep sustainability at its core. This results in a growth which is holistic- covering economic, environmental and social responsibility.

We invest in creating facilities with cutting-edge equipment that can produce, adapt and innovate, as per the needs of the market. With a range of products that cater to all sections of the society, we continue to innovate with a firm commitment to:







### **INDUSTRY 4.0**

As the manufacturing industry prepares itself to take on the challenges of an increasingly digital world, next-gen technologies and the Industry 4.0 framework (I4.0) find themselves at the forefront.

At Mahindra, we are making rapid strides in this new world and are amongst the first to adopt I4.0 in the manufacturing cadence.

Industry 4.0 refers to the current trend of automation and data exchange in the manufacturing environment. Leveraging the 'Industrial Internet of Things' (Industrial IoT), it focusses on the increasing use of information by machines to execute complex, hazardous tasks and comprises devices that are instrumented, interconnected, inclusive and intelligent. It includes cyber-physical systems, edge analytics, cloud computing and cognitive computing.

Our journey into I4.0 is based on establishing key enablers for a framework which will aid the automation and integration of shop-floor processes and machines. Modernisation of controllers with internet protocols will enable some of them to be available remotely for visualisation and optimisation through cutting-edge analytics.

At Mahindra, we are working towards making our systems more transparent and interoperable, backed by analytics, to make these I4.0 tools into instruments for competitive advantage. This will enable us to not only anticipate but also deal with the disruptive technologies that will characterise the future of the automotive industry in India.

## **Centralised Virtual Reality Lab**

The Advanced Engineering team- ADPD inaugurated MRV's very first Virtual Reality Lab. Started in September 2017, it would facilitate ergonomics evaluation through virtual environments, thereby helping engineers understand 'what customer feels' in the real-world conditions.





It is the first of its kind in the country for assessing occupant packaging, ergonomics, assembly and service parameters of the vehicle in a complete immersive environment as seen in major global OEMs.



It is a holistic and accurate evaluation approach to vehicle packaging, including major and minor system inputs. One of the biggest advantages of this lab is the elimination of the need for the static wooden buck thus also furthering Mahindra's sustainability agenda. The lab would be a Centralised Virtual Reality Facility in MRV, catering to other Mahindra sectors and other group companies.

# HEALTH AND SAFETY IMPACTS

The luxury and other features of a vehicle are relevant only if the health and safety of the occupant can be ensured. Being one of the leaders in the automotive industry, we recognise that safety is paramount and takes every step possible to safeguard the safety and health of our customers. We ensure that we test our vehicles at every stage of the development- design, prototype and after delivery.

At the design stage itself, we integrate EHS (Environment, Health and Safety) factors in the product. These include the safest cabin, meeting ECE-29 International safety standard (Regulation concerning the approval of vehicles with regard to the protection of its occupants). The seat and steering are also ergonomically designed to take the best care of the driving persons' body.

The design is followed by the prototype undergoing various demanding tests in all sorts of conditions. These include the 'Crash & Passive safety' in collaboration with global technology partners Applus+ IDIADA and 'Ride & Handling performance' in partnership with international vehicle dynamics partner Cayman Dynamics.

Any lacunae are corrected before the approval for the final product is given. Periodic testing and customer feedback are the follow-up mechanisms to gauge and manage health and safety features in our products. We have dedicated lab facility as well as test track at MRV for carrying out the health and safety tests. Some of the safety aspects include:

### **Auto Division**

- Regulation regarding emission, noise and safety guided by the Central Motor Vehicle Rules (CMVR) in the Indian market are adhered by all our vehicles
- We also comply with other safety requirements like crash, seat belt anchorage, head impact, steering impact and pendulum impact as required under CMVR
- Our vehicles are currently meeting BS-IV emission norms pan India
- We have certified the current European Emission norms of Euro- V, VI with On-Board diagnostic (OBD) system on all our export models of Scorpio SC/DC, Scorpio SUV and XUV 5OO (AWD, TWD), Quanto, Genio and Xylo. We have also certified our Scorpio SUV for L6 emission norms for Brazil.
- OBD II is implemented in all domestic models
- All the export vehicles are complying with applicable OECD & country-specific regulations including those for noise and safety. 50% of our vehicles meant for export market are designed in accordance with European, Australian, South African & South American motor vehicle safety standards and regulations like front, offset, side and rear impact with dummy injury criteria.

In terms of safety technologies, we are pioneers in the market with many first in India launches including:





XUV with 6 Airbags



Electronic Stability Program (ESP)



Hill Hold / Descent Control



ABS with EBD Standard



ISOFIX Child Seat on KUV 100



High Strength Steel



Chassis with Hydroform Features



Dual Airbags



Seat Belt Pretensioner



Front Crash Sensors



**Electrical & Electronics Security Technologies** 

### **BEING FUTURE READY**

### **Provisions for End-of-Life Vehicles**

Increasing usage of vehicles has increased the waste generated due to the disposal of the older vehicle after its life, which hampers the environment. In a year, an average of 8-9 million ton of automotive waste is generated world-wide which is to be handled properly.

As a responsible organisation, we are committed to minimise this effect by taking effective steps regarding the Endof-Life Vehicles (ELVs). This ensures that harmful substances to the environment are not released and the vehicles are stored, treated and disposed of properly. The ELV directive is aimed at:

- · Prevention of certain heavy metals
- De-pollution of fluids
- · Polymeric parts marking
- Achieving reuse, recycle & recovery targets
- Dismantling manual

Its scope includes:

- M1 and N1 category of vehicles
- Regulation applies to vehicle including all their components and materials
- Regulation applies irrespective of how the vehicle has been serviced or repaired

None of our major models have any hazardous materials like Lead, Cadmium, Mercury, etc. Also, dismantling manuals have been developed for the first time for Mahindra vehicles. We have instituted special processes to ensure compliance to EEC directive 2005/64/EC for ELV regulation. For European exports, in line with the EC directive on Recycle, Recovery & Reuse (RRR), here are the recyclability rates of some of our best-selling passenger vehicles:

QUANTO	95.1%
GENIO	96.5%
SCORPIO	94.5%
SCORPIO PICK UP	95.3%
XUV 500	93.9%

### **Farm Division**

We share the same concern for the farmers who use our products, as we do for the occupants of our auto division vehicles. All products are designed, tested and developed for the safety and comfort of the farmers

More than 7000 inputs went into developing YUVO which was then put through 140,000 hours of lab and field testing across 12 states covering relevant applications.



# SOCIAL

We at Mahindra, feel that we can drive a positive change in the lives of all our stakeholders. Whether it is serving the mobility needs of the urban customer, the mechanisation needs of the rural one, taking care of the dreams and passions of our people, helping to build the communities we are a part of, adhering to the laws of the land, or nurturing the planet, we use technology and innovation to catalyse that change and make people Rise for good.

### **Auto Division**

- We are focussing on increasing the fuelefficiency of our vehicles, both in the
  passenger segment as well as commercial,
  and introducing best-in-class mileage
  products across categories. This directly
  affects the social reach of the customer,
  whether he is using the vehicle for business
  or personal use.
- The world is moving towards a less-carbon economy. There is a strategic emphasis on electric vehicles, that is the technology for the future. With the launch of e2O, eVerito and a host of products in the pipeline, we are moving towards creating a range of product in all categories.

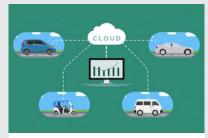
We are planning to invest INR 9 billion in EV technology over the next five years, excluding vehicle level spending.

# MOBILITY SOLUTIONS WITH NEMO PLATFORM

We recently launched NEMO, an emobility platform based on the cloud that enables a new generation of electric, connected and shared mobility services.

NEMO, which stands for 'Next-Gen Mobility', is designed for the future and allows seamless connection between people and the transportation system.

The platform uses 'Connected Vehicle' and 'Internet of Things' technologies to provide real-time visibility into vehicles (traditional vehicle ownership) or fleet (shared mobility) operations and enables data-driven decision making.





# Use electric transport save environment

Electric Vehicles help you reduce carbon dioxide production, save the trees, save the Earth

### **Farm Division**

**TRRINGO** It is a unique, first-of-its-kind physical digital model which allows farmers to rent tractors and other mechanised farm equipment for completing their farming requirements, without actually having to invest in a tractor

**MAHINDRA APPLITRAC** Agri-mechanisation products that make the work of the farmers less strenuous and more productive

**SAMRIDDHI** It is a comprehensive set of services that play a pivotal role in strengthening the farmers capability including market linkages, distribution, agrisupport information ranging from watermanagement to crop solutions, and counselling

MAHINDRA EPC We strive to provide solutions to farmers in modern scientific water management through customised micro-irrigation systems and agronomical support in order to achieve superior product quality and higher crop yields



### **■ COMPLIANCE**

Change is the only constant in the everevolving world. The Governments across the world keep pace with it by modifying the regulations accordingly. We as a company, always push the envelope to set standards higher than the regulatory framework.

Robust systems are in place across the organisation to ensure compliance with the law of the land relevant to the products and services. The last financial year was no different and we continued to comply with all applicable statutes and no non-compliance incidences related to product or service were reported.

As shown below, we also liaise with the Government to build an enabling environment:

- We represent Govt. institutions, committees and agencies on Environmental Building Programme
- We provide technical input on Automotive Industry to the various Govt. forums which decide the Environmental Building Initiatives. Effective benefit is obtained by using our expertise
- We strive to project Vehicle OEM perspective to these forums to arrive an optimal solution to implement effective environmental programmes and at the same time ensure the best interest of our business
- We liaise with SIAM (Society of Indian Automotive Manufacturers) to represent all Govt. committees and forums to express OEM views on framing environmentrelated policies, regulations and programmes
- SCOE (Standing Committee of Emission) under MORTH (Ministry of Road Transport & Highway) which sets the policy of vehicle emission in India

- Member of the committee working with BEE (Bureau of Energy Efficiency) & MORTH to formulate future fuel efficiency norms for India
- BIS (Bureau of Indian Standards) which formulates all the standards for fuels, vehicle parts, etc. Keep OEM's technical interest & requirement in formulating standards
- Member of the expert committee of Alternate Fuel Program & Electric Vehicle under MNRE (Ministry of New & Renewable Energy) to formulate a recommendation to the Planning Commission to formulate the 12th fiveyear plan
- Member of committees which formulates technical recommendation to Govt. to decide national policies like Biofuel Policy, Hydrogen Policy, Auto Emission Policy, etc.

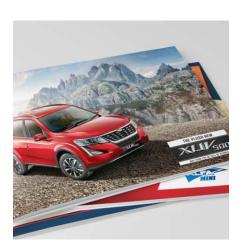
### **Health & Safety Regulations**

Health and Safety holds the highest precedence for us. All our products and services are designed as per regulations and guidelines pertaining to health and safety. We continue to achieve 100% compliance on that front

### **Product & Service Information**

Pertinent information regarding the product and services help the customer use the product better, increasing its life and value. Our product brochures and other branding collaterals enumerate the optimum usage methodology, potential risks and the means to avoid them.

Our communication is focussed on customer centricity, information security, and delivery of high quality and timely information.
Regulatory and mandatory requirements pertaining to labelling, brand promotions, sponsorships and advertising are well adhered to as we provide accurate and relevant information to our consumers.



# MARKETING & COMMUNICATIONS

We don't build products and services to sell. We build them to satisfy the needs, wants and aspirations of our customers. We continue to expand our product portfolio depending on the emerging demands of our customers. These evolving requirements are available to us from the feedback generated and meticulously compiled in our database through a comprehensive system in place for doing that. We also communicate with our customers regarding the actions we are taking based on their feedback and other relevant information.

We take care that our communication is not only consistent but effective. For that our communication is:

- · transparent, fair and timely
- in step with the marketing plans and vice-versa
- in full compliance with all the statutory laws and standards related to marketing communication, advertising, promotion and sponsorship

Our communication is geared to reach the maximum audience so that they understand the benefits and impacts of our products and services. Multiple communication channels including traditional media like television and print as well as social media like Facebook and Twitter are used to display and promote our products and build brand awareness.

All our campaigns on these media adhere to the code of conduct defined by the Advertising Standards Council of India.





### **Our Online Presence**



Mahindra Xylo, Mahindra Scorpio, Mahindra Bolero, Mahindra XUV5OO, Mahindra Quanto, Mahindra Thar, Mahindra KUV1OO, Mahindra KUV3OO, Mahindra Verito, Mahindra Imperio



Mahindra Rise, Auto Division, Mahindra Electric, Mahindra KUV100, Mahindra KUV300, Mahindra Verito

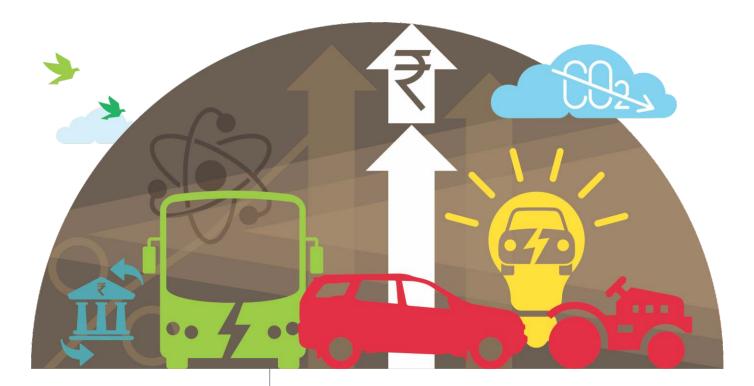


We regularly update our corporate (www.mahindra.com) company website in order to make it more engaging, endearing and user-friendly.



Our extensive presence on social media stems from the top with Mr. Anand Mahindra, the Chairman of Mahindra Group sharing his views as well as organisation's news on Twitter regularly.

### ECONOMIC PERFORMANCE



Economic progress is the bedrock of inclusive progress. At Mahindra, we have always believed in creating substantial value for shareholders through a judicious combination of expansion, productivity improvement and strategic partnerships, resulting in considerable growth. This growth has enabled us to create value for all our stakeholders in an environmentally responsible and socially inclusive manner.

### The year under review

In FY 2017-18, improvement in overall economic sentiment, two consecutive years of normal monsoon, Government's focus on development of rural parts of the country, and the continued investment on the agriculture and infrastructure sectors, coupled with easy availability of affordable finance helped drive the demand for the automotive as well as the tractor industry.

The Automotive and Farm sectors, along with their subsidiaries, associate companies and joint ventures, crossed global sales of 1 million vehicles and tractors (520,286 vehicles and 302,082 tractors), a growth of 10.8% in Automotive and 21.5% in Farm Equipment sector over the previous year.

The Mahindra Group crossed INR 2 trillion in market capitalisation during the year. This is a testimony to its commitment to the Rise of all its stakeholders.

This year the combined sales of vehicles and tractors crossed the 1 million mark.

In the domestic market, we continued to be the









Mahindra & Mahindra + MVML recorded an increase of 15% in net sales and operating income at INR 475.77 billion in the year under review as against INR 413.78 billion in the previous year.

In the auto segment, we were ranked #1 in J.D. Power India Sales Satisfaction Index (Mass Market) Study<sup>SM</sup>, for the year 2017. Scores in the J.D. Power India Customer Service Index (Mass Market) Study<sup>SM</sup> have improved from 798 in the year 2012 to 871 in the year 2017.

In the farm sector, our market share (including Gromax) for the financial year stood at 42.9%. This is the highest ever market share for us and we maintained the leadership position of the domestic tractor market for the 35th consecutive year.

In allied businesses, we continued our leadership position for the 11th year in the power back-up solutions under the Mahindra Powerol brand. Mahindra Earthmaster brand also did well by selling 1,229 Backhoe Loaders (BHLs) against 1,025 in 2017, which is a growth of 19.9%. Mahindra Two Wheelers Limited was demerged into M&M and sold 32,661 vehicles.



### **■** HIGHLIGHTS FY 18

We aim to be among the top 50 most admired Groups in the world by 2021, and we will do this by helping people everywhere, to Rise. This year, Mahindra was placed eighth on the prestigious Interbrand Best Indian Brands study 2017. Some of the other highlights of this year include:

Growth in EPS (basic)

19.4%
to INR 36.64 in FY 18 (M&M Ltd.)

Surge in PAT before EI

and 15% increase in our top line

ROCE

19.6% up 270 bps

Dividend (proposed)

per share

Increase in market capitalisation

### 115 times

over the past two decades

With Mahindra Logistics Limited (MLL) launching its IPO, the journey of rapid growth continues within the Group. In the last 40 years, the share price of the Group has gone up by

# 3,400 times

- Mahindra Group and Ford Motor Company agreed to explore a strategic alliance, designed to leverage the benefits of Ford's global reach and expertise, and Mahindra's scale in India and successful operating model
- Mahindra established two new businesses in Bhutan - diversified into trucks & buses, and construction equipment businesses with Singye Agencies

- Mahindra & Mahindra Ltd. acquired Erkunt Traktor Sanayii A.S. (Erkunt), the 4th largest tractor brand in Turkey. This association with Erkunt, on the back of the Hisarlar acquisition earlier in the year, will help in growing Mahindra's farm equipment business in the strategic market of Turkey
- Mahindra sets up its first assembly plant in Bangladesh by forging a strategic collaboration with Rangs Motors Ltd.

## Some of the products that stood out this year

### **AUTO DIVISION**

### E-ALFA MINI ELECTRIC RICKSHAW

A complete three-wheeler, specifically designed for pollution-free last mile connectivity was introduced, boasting the tough and rugged Mahindra DNA

### JEETO MINIVAN

Launched the Jeeto Minivan, a stylish and comfortable passenger carrier developed on the successful Jeeto platform

### TIVOLI ARMOUR

SsangYong Motor launched the Tivoli Armour in July, an upgraded version of current Tivoli which has earned the No. 1 spot in the compact SUV segment since its launch in 2015



### **FARM DIVISION**

### FIRST-EVER DRIVERLESS TRACTOR

Developed at Mahindra Research Valley in Chennai, the Driverless Tractor technology is set to take farm mechanisation to new heights. With this launch, Mahindra becomes the pioneer in the Indian tractor industry with the unique proposition of a driverless tractor

### OVIL

Mahindra launched the Mahindra Jivo, a 24-HP tractor for small landholders. This new tractor is the outcome of months of hard work, collaboration and understanding the needs of famers as well as customers pan India, post successful testing and trials



### THIRD TRACTOR BRAND

In August, Mahindra and Mahindra Ltd. announced a new strategic direction for its subsidiary, Mahindra Gujarat Tractors Limited (MGTL), now renamed as Gromax Agri Equipment Limited. As part of the renewed strategy, Gromax announced the introduction of its all new tractor brand, Trakstar



### YUVO

Mahindra launched its range of agri-specialist tractors Yuvo in Sri Lanka



### **Beyond Financials**

### **■ ELECTRIC MOBILITY**

With concerns over air quality and the need to reduce the dependence on fossil fuels, we are actively pursuing to create an Electric Vehicles (EVs) ecosystem in collaboration with the Government and other stakeholders.

Spearheading it is our umbrella brand Mahindra Electric - rebranded from Mahindra's electric mobility portfolio - under which we manufacture electric cars, license out our electric vehicle technologies, electrify our new and existing platforms, and help deliver integrated zero emissions mobility solutions.

Some of the steps this year include:

- A key milestone of Mahindra Electric's future technology roadmap, an 'Electric Vehicle Innovation Centre' was inaugurated at Mahindra Electric, Bengaluru in July' 17. It will house testing labs for battery, electrical safety, drivetrain & power electronics, and also enable environmental & durability testing of products by simulating the real-world conditions in a lab environment
- In September' 17, the new electric city-smart car 'e2oPlus' was introduced in Nepal, marking the entry of Mahindra into the mass-market electric hatchback segment. Available across the network in association with Agni Incorporated Pvt. Ltd., it celebrated the completion of 5 years of Mahindra Electric in Nepal and will provide an environmental-friendly choice in the segment for smart city customers. With this, we further strengthened our commitment to sustainable mobility. There has never been a better time to embrace electric vehicles worldwide, as they not only serve the purpose of a smart city car, but also fulfil the need to contribute positively toward a cleaner environment
- We are also planning to power some of our new and existing vehicles with the latest electric
  drivetrain technology from Mahindra Electric. It is a clear embodiment of Mahindra's vision
  of the 'Future of Mobility' which includes the framework of green, connected, convenient
  and cost-effective vehicle technology. It was showcased at the Auto-Expo 2018 with new
  unveils, new technology platforms and concept EVs



### **NEW UNVEILS**

- e-KUV100 (India's first electric SUV)
- **Treo** (low maintenance li-ion battery powered three-wheeler)
- e-COSMO (first electric bus)
- e2o NXT (refreshed version of e2o Plus)

### NEW TECHNOLOGY PLATFORMS

- **MESMA** ((Mahindra Electric Scalable Modular Architecture- adaptable platform)
- +NEMO (NExt-gen MObility- a cloud enabled mobility platform)

### **CONCEPT EVs**

- ATOM (electric mobility with minimalist design philosophy)
- UDO (a compact two-seater electric mobility pod)

### Swift Banking

Mahindra & Mahindra Limited became the first Indian corporate to successfully complete domestic payments via the SWIFT India platform, in partnership with Standard Chartered Bank.

Mahindra selected SWIFT to streamline and rationalise its banking channels using a single and standardised connectivity platform.

The adoption of SWIFT India will bring in process efficiencies through the use of a single, bank agnostic platform and standardised payment formats for both global and domestic flows, while leveraging a platform that is known for its security, reliability and STP (Straight Through Processing) capabilities.

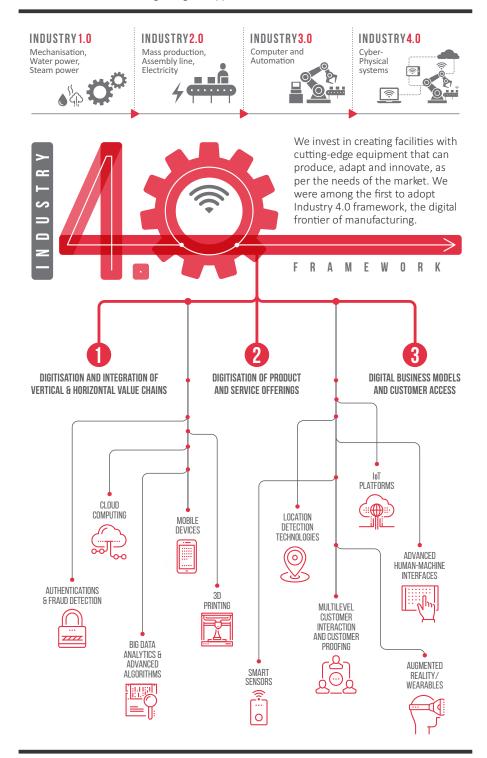
# MANAGEMENT APPROACH

At Mahindra, we look at sustainability not as a responsibility, but as an opportunity. An incredible opportunity to drive positive change for all our stakeholders. This Alternate Thinking, developed and practiced over the years, ensures financial growth and profit, responsibility towards communities and environment, good governance, ethical practices, and respecting the law of the land. In everything we do, we ensure that we Rise to do good.

With a vision to empower people to Rise to their dreams and achieve their full potential, we enable them by creating solutions that provide mobility and productivity. In this, we are led by our 'Futurise' philosophy, where we are not only equipped for the present, but also ready for the future.

Our engineers in India, US, South Korea and Italy, are working to turn our vision of the 5Cs of the future of mobility- Clean, Connected, Clever, Convenient and Cost-effective mobility solutions- into reality.

Some of the factors that are guiding our approach includes:



- Our focus on electric vehicles continues in reference to the need for better air quality and reduce the dependence on fossil fuels, with a planned investment of INR 500 crores
- We are adopting a strategy to develop and introduce petrol engines across the product range.
   With deregulation of fuel prices, the petrol and diesel prices have narrowed and in combination with higher taxes on diesel vehicles, has reduced the demand for diesel vehicles.
   Further, with BSVI emission norms coming into effect from April 1st, 2020, the cost differential in meeting the norms would put more pressure on the diesel vehicles
- We are on course for migrating to BSVI emission norms from financial year 2020 as well as Bharat New Vehicle Safety Assessment Programme (BNVSAP) by financial year 2019 for new vehicles and financial year 2020 for existing vehicles
- Given the importance of the automobile industry to the economy, its potential for generating employment opportunities, and its backward and forward linkages with several sectors, we are keenly supporting the Make in India initiative

# FINANCIAL PERFORMANCE

### Economic Value Generated & Distributed - M&M + MVML

INR million

Economic Value Generated	Net Income	504,813		
Economic	Total expenses	448,125		Economic Value Distrib
Value Distributed	Exceptional items	(4,336.1)		469,217
Distributed	Net current taxes	12,112.3		
	Deferred taxes	2,772.4		Economic Value Reta
	Proposed dividend	10,544.3	FY 2017-18	35,595
Total Economic Value Distributed		469,217.9		
Economic Value Retained		35,595.1		Total Economic Value Gener 504,81

Net Revenue **475,77.58** 

Profit After Tax 46,232.01

R&D			INR million
FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
15,796.11	18,858.90	20,755.80	20,660.75

Research and Development: FY 2017-18 data is only for M&M

### **Financial Assistance Received from the Government**

INR million

i inanciai 7455	iotaliec nece	Trea trem th	c dovernmen						TIVIT TITILIOTI
Name of the Company	Tax relief/ credits	Subsidies	Investment grants, research & development grants, and other relevant types of grants	Awards	Royalty holidays, if any?	Financial assistance from export credit agencies (ECA's) if any?	Financial incentives	Other financial benefits received or receivable from any government for any operation	Total
M&M - FES	846.3	_	_	-	_	_	-	_	846.3
MVML	_	_	867.60	_	_	-	_	_	867.60
Name of the Company	Tax relief/ credits	Subsidies	Investment grants, research & development grants, and other relevant types of grants	Awards	Royalty holidays, if any?	Duty drawback + focus market incentive	Financial incentives	Other financial benefits received or receivable from any government for any operation	Total
M&M - AS	_	_	_	_	_	487.27	_	902.89	1,390.16

# LOCAL SUPPLY

Our goal is to be among the top 50 most admired global brands by 2021.

While we continue our efforts to expand globally, we are committed to localise our production and operation. It not only vitalises the local industry and provides jobs to the local community, but also reduces our carbon footprint. It reinforces our commitment to Make in India as well.

This larger objective of energising the local economy is served with no compromise on quality standards. Some of the aspects which enable us to identify and empanel our suppliers include:

### Performance and on-time delivery

Compliance on Environment, Health and Safety guidelines

Commitment to reduce the carbon footprint

Statutory requirements

Costs | Corporate policy

Although as a corporate business with a base in India, our possibility of local sourcing covers the entire country; each business has its own description and limit of what is classified as local. There may be many factors, but effectively it revolves around - industry requirements, the nature of operation, access to technology and know-how, tax and duty regimes, and supply of skilled manpower.

An analysis of the top 10 suppliers as per monetary value for each business shows that on an aggregate basis, 100% of our requirement was sourced locally.

#### **Local Purchase**

	Total Purchases (INR million)	Purchases from Top 10 Suppliers (INR million)	Purchases from Local Suppliers (within top 10) (INR million)	Percentage of Local Suppliers (within top 10)
Auto Division	1,36,034	36,804.6	36,804.6	100%
Swaraj	34,639.2	14,722.7	12,238.03	83%
Farm Division	59,605.3	16,726.4	16,726.4	100%

# FINANCIAL IMPLICATIONS OF CLIMATE CHANGE

As the GDP of companies and countries rise, so do the emissions and greenhouse gases. This results in an increase in sea level as well as global warming. The growth appetite of mankind has resulted in a serious dent on the limited natural resources available and an alarming effect on the climate. Climate change and volatile weather directly impacts our business, as we are present in the manufacturing and agricultural sector. Consequences include dependence on monsoons, reduced availability of raw materials and rising energy costs, which are detrimental to the long-term survival of our business.

But, these are the conditions we thrive in. Years of active Alternate Thinking has made us realise the importance of threats and how to convert them into opportunities. Following are some ways in which we kept focus on addressing climate change:



Mr. Anand G. Mahindra issued a challenge at Davos 2018, exhorting corporations to come forward and adopt Science Based Targets in large numbers and reach 500 commitments by the Global Climate Action Summit in September 2018. Taking on emission and carbon footprint reduction targets as per the SBT framework is a testimony of the Company's continuing efforts to combat climate change. Mr. Anand Mahindra is a co-Chair in California's Governor Brown's 'The Global Climate Action Summit' in September' 18.





SEPTEMBER 12-14, 2018 | SAN FRANCISCO, CA

I am inviting all companies, particularly those that emit the most, to commit to set science-based targets. So that by Global Climate Action Summit in September, 500 companies step up and commit to set science-based targets.

### **Anand Mahindra**

Chairman, Mahindra Group

• Science Based Targets (SBT) are targets adopted by companies to reduce GHG emissions. They are considered 'science-based' if they are in line with the level of decarbonisation required to keep global temperature increase below 2°C compared to pre-industrial revolution.

Two Mahindra companies - Mahindra Sanyo Special Steel Private Limited (MSSSPL) and Tech Mahindra Ltd. - had made a commitment to set an SBT, which is adopted by companies to reduce GHG emissions



- We became the first Indian company to sign EP100 commitment- a commitment to double our energy productivity by 2030, on a baseline of 2005- and hope to make a strong contribution towards achieving the climate goals agreed upon at COP21
- Mahindra Group CSO, Mr. Anirban Ghosh is on the 'Expert Committee on Carbon Revenues'. This is led by a World Bank enabled group called I4CE (Institute for Climate Economics). Earlier, we became the 1st company in India to declare an Internal Carbon Price of \$10 per tonne of carbon emissions in 2016 and our carbon pricing leadership story featured in the World Bank Report
- We are investing in solar power too. This year, we have installed 269 kWp Solar Power Plant at a tractor warehouse, which will cater to 27% of our power requirement in Jaipur plant



 Over the last two years, our total water consumption has come down by almost 1,34,696 m<sub>3</sub>. Automotive Sector and Farm Equipment Sector recycled and reused 35% and 43% respectively of the total water consumed



- We partnered with Energy Efficiency Services Limited (EESL) for an LED replacement programme with energy efficient (EE) alternatives across Mahindra's 18 manufacturing facilities in India. The installation of LED lighting will save 20 million units of electricity per annum. Mahindra has made an investment of INR 16 crore in this project
- M&M announced a collaboration with LG Chem, Korea's leading manufacturer of advanced batteries for Li-ion battery technology, to jointly support EV revolution in India. We will develop a unique cell exclusively for India application and will also supply Li-ion cells based on NMC (nickel-manganese-cobalt) chemistry with high energy density. These cells will be deployed in the Mahindra and SsangYong range of Electric Vehicles. LG Chem will also design the Li-ion battery modules for Mahindra Electric, which in turn will create battery packs for the Mahindra Group and other customers
- We continue to disclose our performance in Dow Jones Sustainability Index (DJSI), Carbon Disclosure Project (CDP) and CII Sustainability Plus. Sustainability Roadmap with targets taken to reduce carbon emissions, water consumption, increase in use of renewable energy and enhance recycling of waste, is reviewed consistently

# ENVIRONMENTAL PERFORMANCE



In finance, when we spend too much we run up debt which if left unchecked can eventually lead to bankruptcy. Similarly, drawing down resources from nature, without any control, can lead to collapse of the ecosystem.

It is, therefore, imperative to enhance environmental performance in an efficient manner so that we can reduce scarcity of resources, mitigate operational and supply chain risks, and create value for all the stakeholders today and in the future.

### | MANAGEMENT | Approach

At Mahindra, we understand that we are borrowing resources from nature and it is our responsibility to pay back. That is why our environment management approach is governed by 3Cs- conservation, continuous improvement and comprehensive disclosures.

We have a cohesive framework, well-structured processes and focused interventions as the foundation of our resource management strategy to rejuvenate the natural assets. Our environmental performance comprises initiatives to manage energy, waste, water and biodiversity.

All our interventions are directed towards the KPIs material to our business.

### **CARBON NEUTRALITY**

Acting to reduce greenhouse gas emissions to zero - and then 'offsetting' an equivalent amount of any remaining emissions.

- Mahindra's carbon pricing leadership story featured in World Bank report
- Inaugurated onsite solar power plant
- Setting up bio-CNG plants

### WATER POSITIVITY & SECURITY

Creating more water than we are actually using for a sustainable future through reduction, reuse and harvesting.



- · AD Igatpuri plant certified as a water positive plant
- Detailed risk mapping and audits at different plants
- LEED certification for efficiency right from design stage
- · IGBC green building certification

### ZERO WASTE & CIRCULAR ECONOMY

Creating a restorative, zero-waste economic model in which resources are used to full capacity and natural systems are regenerated.

- AD Igatpuri plant certified as a zero waste to landfill company
- · Paint sludge and cotton waste recycling
- · Setting up biogas plant



### PROMOTING BIODIVERSITY

Where each species, no matter how small, have an important role to play.



- Conducted biodiversity assessment at AD Zaheerabad
- Reporting on 10-point India Business & Biodiversity Initiative (IBBI) declaration
- Partnering with world leaders like IBBI, Terracon and IUCN on biodiversity

### **Environmental Policies**

Environmental policies at M&M have been integrated into our business and implemented Group-wide helping us minimise impact and restore the environment, contribute to long-term sustainability of products and services, and improve the local environment and community in which we operate. This in turn has led to positive relations with our stakeholders. Every employee adheres to the environment policy and its implementation is overseen by plant managers of respective facilities.

The manufacturing plants of M&M are now in the process of being certified with ISO-14001-2015 Environment Management System

### AUTOMOTIVE & FARM EQUIPMENT SECTOR - ENERGY MANAGEMENT POLICY

The Automotive & Farm Equipment sector has formulated an energy management policy which focuses on maximising productivity by:

- improving the organisation's energy performance through implementation of energy management system
- setting energy objectives, targets and review mechanism
- ensuring availability of necessary information and resources to achieve objectives and targets
- complying with all applicable legal and other compliance obligations related to energy use, consumption and efficiency
- promoting use of renewable energy and green initiatives to conserve natural resources
- delivering on carbon price to spur innovation
- purchasing energy efficient products as per green procurement policy and design for improving the energy performance throughout their life cycle
- encouraging stakeholders, associates and supply chain partners for adoption of energy management systems as applicable

The energy policy is reviewed periodically during management reviews.

### AUTOMOTIVE & FARM EQUIPMENT SECTOR - SUSTAINABILITY POLICY

The Automotive sector has formulated a sustainability policy which focuses on integrating sustainability practices to:

- mitigate climate change risk to our business
- embed environmental and social aspects in our business decisions and goals
- deliver on carbon price and spur innovation
- achieve carbon neutral status and focus on driving EP100 programme
- ensure zero waste to landfill and circular economy
- encourage employees and society at large to adopt sustainable practices
- foster inclusive development
- maintain a clean and healthy work environment for employees
- build a sustainable value chain
- grow green revenue by developing new products and improving existing ones
- optimise use of natural resources through material substitution, recycling and reuse

### Sustainable Supply Chain Management

M&M serves 20 key industries and has an operational presence in over 100 countries with a total supplier base of 1,000. The success of our businesses is inextricably linked to the performance of our supply chain. Besides being effective and efficient, we ensure our supply chains are sustainable.

We undertake proactive engagements with our suppliers and vendors to encourage environment-friendly practices beyond our factory gates and motivate them to adopt green initiatives. We promote a supply chain that has least impact on the environment, does not deplete natural resources, and contributes to social justice and equality.

In the reporting period, following sustainability initiatives were rolled out across our supply chain.

### REVISED SUSTAINABLE GREEN SUPPLY CHAIN MANAGEMENT & PROCUREMENT POLICY - 2016

M&M revised its sustainable green supply chain management and procurement policy in the reporting period to enhance sustainability performance and minimise environmental, social and financial risks within M&M's supply chain.





- Policy released by Mr. Hemant Sikka (EVP & Chief Purchase Officer AFS)
- Applicable to M&M AFS suppliers, logistics and service
- Policy is based on latest Sustainability

GRI G4 guidelines, peer benchmarking,

investor requirements and materiality mapping

# Constraintifies Gireen Stupply Chesh Menningment 6. Procurement Public Best analysis Gireen Stupply Chesh Menningment 6. Procurement Public Marchard Student Student sour detailed this requested by some procurement of the second procurement of the sec

### ENGAGING THE SUPPLIERS ON SUSTAINABILITY

Igatpuri Plant organised the fifth "Supplier Sustainability Meet" at Pentwyn Club urging supplier partners to make sustainability a way of life and take forward the sustainability initiatives to their respective manufacturing facilities. 32 suppliers actively participated in the event. 20 of the suppliers also presented their initiatives on sustainability. The best initiatives were judged by jury members and top presentations were awarded.

SCPC organised a supplier meet for Mumbai based suppliers at Kandivali Plant to discuss tractor industry outlook for FY 2018-19 and M&M's journey towards global leadership.

Suppliers were also informed about the priorities including TPM at suppliers' end, schedule on M-setup and 100% recyclable packaging.



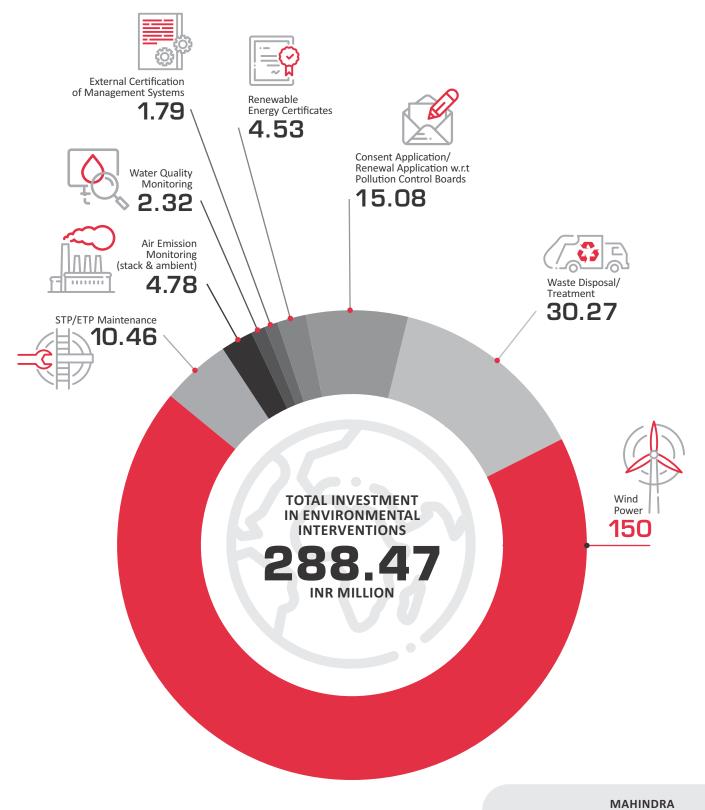
### OTHER KEY INITIATIVES

- Developing the sustainability ecosystem:
   Capability building for 345 suppliers till date since 2016
- Conducted Supplier Sustainability
  Assessments for 43 suppliers at AFS level
- Reduced wooden packaging by 15% and 62% in AD and FD respectively



- Sustainability Balance Scorecard for 80 suppliers at AFS level
- Implemented Total Productive Maintenance at 40 suppliers
- Conducted Dealer Sustainability Assessment of 500+ dealers for FD through DSQI & for 537 dealers through MDEP
- Installed rainwater harvesting at 31 suppliers and solar energy at 25 suppliers
- Collaborated for solar power with mSusten and SMEs
- Installed LED at 101 suppliers through EESL
- Conducted extensive energy audit at 4 suppliers in collaboration with Institution of Sustainable Communities. Target set for FY 2018-19 is 25 suppliers
- Trained 278 suppliers on EHS Champions by FHS+ Centre

### ENVIRONMENTAL MANAGEMENT





GROUP'S REVENUE FROM GREEN PRODUCTS

419
MILION INR

### **Calculating Specific Consumption**

We measure our environmental performance on absolute as well as specific basis. The specific consumption is calculated by dividing absolute consumption by a denominator based on the nature of business. For e.g., in case of manufacturing business units, it is the number of units produced, whereas for services, it is the number of employees, or units of services offered, etc. The denominators for the companies of the sector are delineated in the following table.



### **Specific Consumption**

	Unit of	Denominator				
Business	measure	2015-16	2016-17	2017-18	Change in 2017-18 over previous year	
Automotive Division (AD)	Equivalent number of vehicles manufactured	584,733	559,869	608,807	8.74%	
Farm Division + Swaraj Division (FD+SD)	Equivalent number of tractors manufactured	332,577	423,592	488,474	15.32%	
Spares Business Unit (SBU)	Tonnes of packaging material	6,691	7,356	6,925	5.86% ▼	
Swaraj Foundry Division (SFD)	Tonnes of production	21,838	29,231	32,149	9.98% 🛕	
Nashik Plant Dies (NPD)	Equivalent Dies	327	559	525	6.08% ▼	
Mahindra Research Valley (MRV)	Full Time equivalent employees	2,530	2,815	2,815	Unchanged 🔲	
Corporate Centre (CC)	Area of facility in sq. m.	14,680	14,680	14,680	Unchanged	

Note: The methodology for calculation of equivalent vehicles has been changed for Auto Division. Hence, the prior year figures for AD have been changed accordingly.

### **AIR QUALITY**

While manufacturing contributes to the growth of the nation, it is also responsible for poor quality of air which adversely affects the health of the people and the ecosystem. Being a manufacturer, we are conscious of the impacts of our operations and take responsibility and ownership of our actions.

We proactively adhere to all the statutory norms and regulations in the state or the country we have presence in. Meticulous monitoring systems are in place to keep track of various pollutants which contaminates the air.

In accordance with the revised National Ambient Air Quality Standards (NAAQS 2009), the Particulate Matter PM10 (size less than 10  $\mu$ m) & PM2.5 (size less than 2.5  $\mu$ m), Sulphur Oxides (SOx) and Nitrogen Oxides (NOx) are regularly monitored across our manufacturing and service locations. Some manufacturing plants also monitor more specific pollutants applicable to their processes like Respirable Suspended Particulate Matter (RSPM), Carbon Monoxide (CO), Methane (CH), Ozone (O), Lead (Pb) among others.

### OZONE DEPLETING SUBSTANCE (OSD)

OSDs deplete the earth's ozone layer which protects living beings from the sun's ultraviolet radiations. The discharge of ODS can adversely affect nature's balance and, therefore, we continuously monitor and improve our processes. We reduce our consumption of resources and emission of ODS such as Hydrofluorocarbons (HFCs), Hydrochlorofluorocarbons (HCFCs) and Halons.

### **Ambient Air Quality 2017-18**

microaram/m<sup>3</sup>

inter ogran						
Sectors	PM 10	PM 2.5	SOx	NOx		
NAAQ LIMITS - 2009	100	60	80	80		
AD	42.4	18	6.55	9.74		
FD+SD	95.70	49.90	6.47	14.67		
SBU	6.45	3.1	0.963	2.57		
SFD	92	90	0	5.09		
NPD	85	32	6.37	4.96		
MRV	33.70	15.60	10.70	12.40		

### Air Emissions (Stacks) 2017-18

tonnes

			tormes
Sectors	TPM	SOx	NOx
AD	6.97	3.87	6.08
FD + SD	0.37	16.90	20.90
Mahindra Spares Business	0	0	0
SFD	0.046	0.0129	0.0534
NPD	0	0	0
MRV	3.29	0.592	3.90

### **GREENHOUSE GASES**

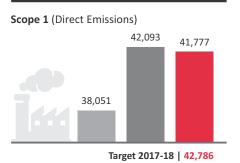
Greenhouse gases are emitted in a variety of ways including fossil fuel in cars, factories and electricity and they are responsible for global warming. The solution to this problem is to reduce energy consumption and switching from fossil fuels to alternate energy. We constantly strive to reduce this risk through constructive contribution based on efficient measurement, control and mitigation of GHG emissions.

# This year, our businesses together mitigated 17,879 tCO<sub>2</sub> of GHG emissions

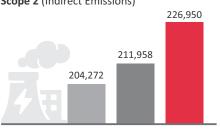
Despite increased production activity across a number of businesses within M&M, we have managed to keep the scope 1+2 emissions in check. We remain committed to reduce our GHG emissions by 25% by 2019.



tCO<sub>2</sub>

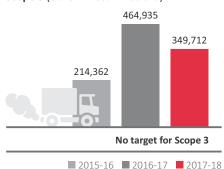


Scope 2 (Indirect Emissions)



Target 2017-18 | 229,689





Our scope 1 emissions have gone down by 2.4% to 41,777 tCO<sub>2</sub> compared to last year and surpassed the target set for lowering the direct emissions in FY 2017-18. Our scope 1 emissions are down 2.41% against the target of 42,786 tCO<sub>2</sub> due to process improvements and switchover to cleaner fuels.

Scope 2 emissions have increased marginally by over 1% due to increase in production. However, we have been able to surpass our target set for lowering indirect emissions. Due to switchover to the cleaner fuels, our scope 2 emissions are down 1.21%, compared to the set target.

### **GHG Emissions - By Source\***

**Electricity Purchased** 

paper consumption

SCOPE 3 - OTHER DIRECT EMISSIONS
Inbound logistics, outbound logistics,

daily commutation, air travel,

,					
Source	2015-16	2016-17	2017-18		
SCOPE 1 - DIRECT EMISSIONS					
Diesel/HSD	14,602	16,561	12,655		
Furnace Oil	338	205	NA		
LPG + (Bharat Metal Cutting Gas)	3,480	3,652	5,582		
Natural Gas + CNG	15,914	16,053	15,598		
Petrol	547	713	968		
Propane	3,171	4,909	6,974		
Grand Total	38,051	42,093	41,777		
SCOPE 2 - INDIRECT EMISSIONS					

204,272

214,362



tCO,

### GHG Emissions Division-Wise Composition\*

L	C	C	'

	2015-16		2016-17			2017-18			
Sector	Scope 1	Scope 2	Scope 3	Scope 1	Scope 2	Scope 3	Scope 1	Scope 2	Scope 3
AD	18,620	95,948	172,747	20,024	87,465	385,049	17,943	94,897	154,323
FD+SD	14,000	61,594	35,221	15,819	70,720	65,917	17,609	75,421	174,941
SBU	143	1,116	4,963	77	1,611	13,223	155	1,919	17,313
SFD	873	20,337	780	1,119	25,427	202	1,081	27,884	1,267
NPD	27	1,929	9	27	2,432	5	29	2,250	3
MRV	4,385	20,819	642	5,026	21,844	539	4,959	22,177	1,865
СС	DNA	2,529	DNA	DNA	2,460	DNA	0.25	2,403	DNA

211,958

464,935

226,950

349,712

DNA - Data Not Available

The total specific emissions have gone down by 7% in FD+SD to  $0.190~\rm tCO_2$  in FY 2017-18 compared to  $0.204~\rm tCO_3$  in FY 2016-17.

The emissions have also reduced by 3% in AD to 0.185 tCO $_2$  in FY 2017-18 as against 0.192 tCO $_2$  in FY 2016-17 due to process improvements and switchover to cleaner fuels. However, emissions have increased significantly in SBU by 31% to 0.300 tCO $_2$  due to reduced production and better reporting.

### **Total Specific Emissions (Scope 1+2)\***

tCO₂/unit of measure

Total opcoli		- (ocope 112	teo <sub>2</sub> , ant of measure	
Sector	2015-16	2016-17	2017-18	% Reduction in 2017-18 over previous year
AD	0.196	0.192	0.185	3%
FD+SD	0.227	0.204	0.190	7%
SBU	0.188	0.229	0.300	-31%
SFD	0.971	0.908	0.901	1%
NPD	6.000	4.398	4.340	1%
MRV	9.962	9.545	9.640	-1%
СС	0.172	0.168	0.164	2%

Note: The specific emission of AD has changed for previous years due to change in methodology for calculating equivalent vehicles.

<sup>\*</sup>Above emission figures are calculated by Mahindra & Mahindra Limited using the following emission factors (a) Diesel (2.644 T CO,e/KL), (b) Petrol (2.302 T CO,e/KL), (c) LPG (0.00298 T CO,e/Kg), (d) Grid electricity (0.82 kg CO,e/KWh), (e) Outbound travel (0.00264463 T CO,e/Km), (f) Daily commute (0.002645 T CO,e/Km), (g) Paper (0.0029 T CO,e/Kg), (i) Inbound-Land cargo (0.002645 T CO,e/Km) and (j) Employee Air travel (0.000121 T CO,e/Km)

### **GHG Mitigation**

tCO,

	1002
Sector	2017-18
AD	4,774
FD + SD	12,811
SFD	127
MRV	167
Total	17,879



### **BIODIVERSITY**

Conservation of biodiversity leads to a balanced climate and vital ecosystem services required to boost the economic activity. M&M has been focusing on biodiversity and its sustainable use in its operations and beyond towards rejuvenation of India's biodiversity.

Some of our interventions to conserve and rejuvenate biodiversity include ascertaining value from environmental performance, reporting on 10-point India Business & Biodiversity Initiative (IBBI) declaration, conducting biodiversity assessments, and partnering with world leaders like IBBI, Terracon and IUCN on biodiversity.

### INITIATIVE

### **BIODIVERSITY ASSESSMENT AT ZAHEERABAD**

### CHALLENGE

The Automotive sector depends directly as well as indirectly on biological diversity, ecosystems and its services. The relationship is complex and linked to value chain.

The raw materials which are extracted from mines for production and the waste material disposed can have a range of impact on the biodiversity and ecosystem services. The challenge is to mitigate the risks related to the ecosystem services and securing corporate production through conservation and rejuvenation of biodiversity.

### INTERVENTION

The single season biodiversity assessment was taken up at the Zaheerabad project in December 2016 to effectively manage floral and faunal biodiversity within the project sites and the nearby areas.

The sampling was carried out at various locations within the project site and nearby areas. The three sites identified include Auto Division, Farm Division and colony area.

The total land acquired for the purpose was 343.25 acres, of which 101 acres is with Auto Division, 88 acres with Farm Division, 85.25 acres with colony area and 69 acres lying vacant.



The project sites are highly dependent on air quality regulation, carbon sequestration, noise and dust control on greenbelt and horticulture areas. If these impacts are not managed properly it may result in degradation of one or more ecosystem services.

### Observations recorded during site visits

- Leucaena leucocephala (Subabul) was recorded within the greenbelt, horticulture and
  colony areas of the project. In the absence of timely intervention, the growth of weed can
  lead to degradation of plantation and loss of productivity in the horticulture area.
   Subabul has been reported as a weed in more than 20 countries across all continents and
  listed as one of the '100 of the World's Worst Invasive Alien Species' by ISSG and IUCN.
- Most of the greenbelt area under observation had only mango plantation. The greenbelt performs better with mix plantation of different varieties and provides high quality ecosystem services and habitat to local fauna.
- Biodiversity index of the site was analysed. Based on all the inputs the biodiversity index of the site was 48 out of 100 points.

### **Natural Capital Action Plan (NCAP)**

Based on the observations, NCAP was prepared to improve the biodiversity quotient of the project area and mitigate risks. NCAP focused on identifying, evaluating, conserving (and if possible enhancing) the relevant aspects of biodiversity and ecosystem services. As part of the NCAP several initiatives were taken up.

- Invasive species (Subabul) removal plan with new plantation
- Shrubs for roadside plantation Development of butterfly garden
- Installation of nest boxes for birds

### **ENERGY**

Without energy, there is no manufacturing. In a globally competitive environment, efficient management of energy has become more critical for two major reasons: it is directly related to reduction in greenhouse gas emission, and it leads to cost reduction. At M&M, we have a two-pronged approach to energy management. First, maximising the output from each watt of energy consumed, and second, increasing alternative energy in our total energy mix. All our interventions are focused on this approach.

Last year, we signed up for the 'EP100' campaign led by The Climate Group, to double our energy productivity by 2030. This is part of our contribution towards achieving the climate goals agreed upon at COP21.

We adopted a range of technologies for enhancing our energy productivity. This includes energy efficient lighting, air-conditioning, motors and appliances, etc. We also re-engineered business processes to reduce energy demand, heat recovery projects to use waste heat productively and construction to reduce the need for energy.

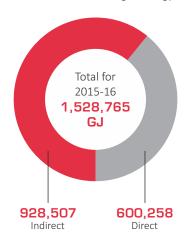
We are investing in solar power, too. This year, we installed 269 kWp solar power plant at a tractor warehouse, which will cater to 27% of our power requirement in our Jaipur plant.

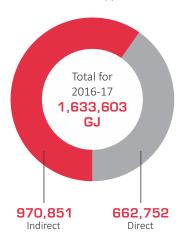


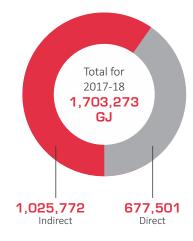
### **Absolute Energy Consumption**

(in GJ)

The absolute energy consumption increased in FY 2017-18 due to increase in production of most businesses. The calculations that are included are for GJ only all types fuels, electricity from grid, renewable power, etc. and are reported in absolute & specific terms showing trends of 3 years. The calculations for deriving at energy are based on GHG Protocol and the approach for energy is operational control.







### **Total Energy Consumption by Source**

Source	Energy Consumed (2017-18)	% of Total Energy
Electricity Purchased from Grid	1,006,308	59
LPG	88,600	5
Diesel/HSD	170,792	10
Natural Gas + CNG	278,093	16
Petrol	13,966	1
Propane	113,216	7
Renewable Energy Source	32,298	2



### **Total Energy Consumption**

Sector	2015-16	2016-17	2017-18
AD	767,753	748,125	748,954
FD+SD	484,969	563,991	615,296
SBU	5,636	8,116	10,522
SFD	101,201	126,875	138,824
NPD	8,837	11,039	10,271
MRV	148,053	164,655	168,855
СС	11,115	10,801	10,551

### **Specific Energy Consumption**

Sector	2015-16	2016-17	2017-18	% Reduction in 2017-18 over previous year
AD	1.313	1.336	1.230	8%
FD+SD	1.459	1.331	1.260	5%
SBU	1.022	1.103	1.519	-38%
SFD	4.635	4.340	4.318	1%
NPD	27.109	19.748	19.563	1%
MRV	58.52	58.492	59.984	-3%
СС	0.758	0.736	0.719	2%

Note: The specific energy of AD has changed for previous years due to change in methodology for calculating equivalent vehicles.

### **Energy Savings**

GJ

GJ

GJ

Sector	2017-18
AD	17,491
FD + SD	65,179
SFD	803
MRV	733



84,207 GJ energy saved through sustained energy saving initiatives amounting to INR 139.80 million.

# We have surpassed our target for total energy consumption this year by over 1%. Against the target of 477 947 MWh set for FY

energy consumption this year by over 1%. Against the target of 477,947 MWh set for FY 2017-18, the total energy consumed stood at 473,132 MWh.

Energy generated or purchased from renewables, such as wind and solar, saw a significant increase of over 100% in the total energy consumed to 8,972 MWh from 3,909 MWh, due to increase in solar and wind capacities at our plants. Energy from fuel and purchased from grid also saw a marginal increase due to increase in production and indirect renewables.

### **Energy Saving Initiatives**

A watt saved is a watt generated. We continued to find ways and implement them to conserve energy across the entire process of production. This year, some of the key energy saving initiatives taken up at M&M includes heat recovery, energy efficient airconditioning and programmable logic controllers.

### **Total Energy Consumption**

Total Energy Consumption				
Energy Source	2015-16	2016-17	2017-18	Target 2017-18
Non-renewable (Fuel)	166,738	184,098	188,195	
Non-renewable (Electricity purchased from grid)	257,919	269,681	284,937	
Renewable energy (Wind, solar, generated or purchased)	3,139	3,909	8,972	
Total Energy Consumption	424,657	453,779	473,132	477,947

### GREEN STAMP OF APPROVAL | MAHINDRA TOWERS, KANDIVALI

Mahindra Towers, Kandivali, was awarded with a Platinum Rating by the IGBC council after its evaluation on five categories — Site & Facility Management, Water Efficiency, Energy Efficiency, Health & Comfort, and Innovation in Design. The IGBC is part of CII and is actively involved in promoting the Green Building movement in India.

This certification is a validation of Mahindra's vision to Crusade 2.0, to promote sustainability, and reduce carbon and water footprint. Mahindra Towers, Kandivali, is the second existing building to be awarded certification under IGBC after Igatpuri Plant admin building.

### ENHANCING AWARENESS FOR CONSERVATION | MIQ

Mahindra Institute of Quality (MIQ) and Group Sustainability conducted a training course on 'Energy Management – The Mahindra Way' at MIQ, Nashik with the objective of enhancing energy conservation awareness for effective asset selection, resource utilisation, process optimisation, enhancing operational efficiency and disseminating latest techniques and advancements in the field of Energy Management.

The course was conducted by internal and external faculties with the focus on reducing electrical and thermal energy usage. A total of 25 participants from Auto, Farm, Swaraj Division, Spares Business, Mahindra Accelo, Mahindra Heavy Engines and MRV attended the course. It also included participants from Mahindra suppliers, namely the CIE Forging division.





### • NANO STEP TO BIG ENERGY SAVINGS | FD ZAHEERABAD TRACTOR PLANT

The Farm division started using Hydromx, a NanoTherm fluid in paint shop's hot water generators at FD Zaheerabad tractor plant. This fluid uses nano-particles suspended in water and in stable state it increases the speed of heat transfer, thereby requiring significantly less energy (propane gas). Introduction of Hydromx resulted in reduction of propane gas consumption by 20%. Buoyed by the results, the technology will be horizontally deployed across the Farm sector- Zaheerabad, Nagpur, Jaipur & Rudrapur paint shops. **Hydromx will save around INR 6 million annually and 1.5 lakh kgs of propane gas, thereby reducing our carbon footprint by 400 tons annually.** 





### • SWITCHING TO CLEANER FUEL | MAHINDRA POWEROL

### New Gensets for the New-Generation

Diesel generator sets (gensets) meant loud noise and mess, and not good for the environment. Mahindra Powerol has come up with gas gensets which are less noisy and messy, and clean compared to diesel powered gensets.

These new-age gensets are approved by Central Pollution Control Board Stage 2 Emission Norms (CPCB-II). The zero-particulate matter in the genset will result in negligible pollution.



### SNAPSHOT OF SOME ENERGY INITIATIVES

Sector	Location	Description	Energy Saved (GJ)
		Replaced 250W HPSV lights with 120W LED high bay lights for energy efficiency and durability	386.21
	Zaheerabad	Replaced 250W flood light with 120W LED	150.36
		Replaced 2x28W fluorescent tube lights with 2x18W LED tube lights	406.43
		Heater-less vaporiser	266.14
	Haridwar	Installed polycarbonate sheet in store areas, Bolero body changeover, 4th shed, Bolero store, etc. in place of 120 watt 28 Nos., 250 watt 20 Nos. and 75 watt 22 Nos.	155.64
		Eliminated load loss of 4% by shutting down back- up transformer while not in use	188.70
AD Igatpuri		Eliminated cooling tower pump by pipeline modification	189.22
		Optimised power at machine shop	162.00
Kandivali		Reduced distribution loss by removing unwanted cables	423.36
		Installed LED street and office lights	1,242.93
	Nashik Plant 1	Low temperature heat recovery by using PT Line RC 1 tank heat to Top Coat ASU 1	601.46
65	Swaraj Plant 1		
SD	Swaraj Plant 2	Controlled heater by thyristor control	241.92
FD	Jaipur	Improved power saving through productivity	3,408.62
FD	Rudrapur	Installed heating coil in TR line	1,166.42
		Total Energy Savings	9,500.61

# Monitoring Energy Efficiency of Major Suppliers

Our suppliers are our allies. They are essential for ensuring seamless value chain for the company's success. Thus, investing in their sustainability makes M&M more sustainable.

We share an extremely positive relationship with the suppliers and engage with them on sustainability issues to yield positive outcomes.



Suppliers	Energy Consumption (GJ)
Happy Steels Private Ltd.	19,178
Mitter Fasteners	15,556
Autocomp Corporation Panse Pvt. Ltd.	8,773
Minda Stoneridge Instruments Ltd.	12,350
Ved Industries	9,422
Menon & Menon Ltd.	131,008
Super Craft	107,158
Prince Metal Works	44,481
Innova Rubber	21,698
Shilp Enterprises	16,733
Mayuresh Engineering Works	58,187

### **WATER**

Besides being vital for human life, water is critical for all industries and is central to sustainable economic activity and growth. Even the production of raw materials, energy and food relies heavily on access to water. At Mahindra, we are aware that demand of water will keep growing with increasing scale and scope of business and, therefore, we have always been proactive in conserving and replenishing this natural resource.

In FY 2013-14, Mahindra Group achieved water positive status through our 360-degree water management programme - H2Infinity. We are in the process of making our plants self-sufficient in water as we consider water as both a risk and opportunity. As part of this strategy, AD, Igatpuri plant was certified as a water positive plant.

We have made concerted efforts to rejuvenate sources of water. We have a dedicated crossfunctional team in place to take up initiatives. Their performance is closely monitored and linked to their KPIs to foster a culture of ownership.

No water source is significantly affected by M&M Operations.

- Our total water consumption has gone up marginally this year to 1,406,365 m<sup>3</sup> compared to 1,356,578 m<sup>3</sup> in FY 2016-17
- 498,919 m³ of water recycled and reused across businesses
- 35% of the total water consumption was recycled and reused
- AD and FD recycled and reused 35% and 43% of its water, respectively

### **Total Water Consumption**

m

Sector	2015-16	2016-17	2017-18
AD	789,572	654,303	677,425
FD+SD	504,612	467,752	474,504
SBU	11,392	27,280	31,304
SFD	47,348	49,439	51,104
NPD	9,198	8,166	8,737
MRV	138,271	109,309	126,271
СС	40,668	40,329	36,984
Total	1,541,061	1,356,578	1,406,329



### **Specific Water Consumption**

m³ per unit of measure

Specific Water Consumption			III per unit of measure	
Sector	2015-16	2016-17	2017-18	% Reduction in 2017-18 over previous year
AD	1.350	1.169	1.113	5%
FD+SD	1.517	1.104	0.971	12%
SBU	1.702	3.709	4.519	-22%
SFD	2.168	1.691	1.591	6%
NPD	28.145	14.608	16.642	-14%
MRV	54.652	38.381	44.857	-16%
СС	2.770	2.747	2.519	8%

Reduction in Specific Water Consumption reported for AD, FD+SD, SFD, CC in FY 2017-18 compared to previous year.

Note: The specific water of AD has changed for previous years due to change in methodology for calculating equivalent vehicles.

### **Water Withdrawal by Source**

 $m^3$ 

### Bottled 1,591 | 0.11% Water Ground 618,935 | 44% Water 52,405 | 4% Rainwater Total Water Withdrawal 1,406,365 m<sup>3</sup> Surface 0 | 0% Water Water from 624,958 | 44% Municipality Water from 84,570 | 6% Tanker Wastewater from 23,906 | 2% other source

### **Volume of Water Recycled & Reused**

Sector	Volume of water recycled & reused (m³)	% of water recycled and reused out of total water consumption
AD	239,857	35
FD + SD	202,061	43
SBU	5,772	18
SFD	13,282	26
MRV	37,417	30
СС	530	1

### **Absolute Water Consumption**

Million cubic metres

Source	2015-16	2016-17	2017-18	Target 2017-18
A - Municipal Water Supplies	0.819433	0.703096	0.735025	
B - Fresh Surface Water	0.031578	0.027115	0.052405	
C - Fresh Ground Water	0.69005	0.626367	0.618935	
D - Water returned to the source of extraction at similar or higher quality as raw water extracted	0	0	0.03322	
Total Net Fresh Water Consumption (A+B+C-D)	1.541061	1.356578	1.373145	1.5116

We surpassed our target for absolute water consumption. Our total net fresh water consumption for FY 2017-18 stood at 1.373145 million cubic metres as against the set target of 1.5116 million cubic metres.

### **Discharged Water Quality**

Industrial wastewater if discharged untreated can have far reaching effects on the ecosystem and human health. We adhere to limits specified by the state, national and pollution control boards and continually monitor our wastewater discharge to ensure that it is free from pollutants.

### **MATERIALS**

Materials are used as an input for our production processes and subsequently modified or transformed into a finished good. At M&M, we minimise the use of material in the production process, select most economic raw material, and reduce and

recycle waste to minimise the amount of unutilised material. This year, despite the increase in production at AD, the material consumption of semi-manufactured material (tonnes) came down by 4.1% to 762,121 tonnes compared to last year's 794,717 tonnes. The consumption of semi-manufactured material (liquid) also decreased by over 52% to 3,886 kl compared to previous year's 8,139 kl. On the other hand, because of higher production by FD+SD, the corresponding material consumption increased.

### **Material Consumption**

Material	Unit	2015-16	2016-17	2017-18				
AD								
Semi-manufactured	Tonnes	808,808	794,717	762,121				
Semi-manufactured	KI	8,258.83	8,139	3,886				
FD+SD								
Semi-manufactured	Tonnes	349,925.75	494,570	590,930				
Associated material		305.95	169	165				
Raw material		31,345.82	28,625	31,258				
Packaging material		1,737.54	1,264	60				
Total		383,315.06	524,628	622,413				
Semi-manufactured	KI	8,037.43	1,593	1,460				
Associated material		4,041.60	5,048	5,368				
Total		12,079.03	6,641	6,828				
Semi-manufactured	Nos.	585,466	968,247	1,115,451				
Associated material		161,843	107,427	34,761				
Raw material		38,396	51,648	58,017				
Packaging material		0	0	2,050,343				
Total		785,705	1,127,322	3,258,572				
Packaging material	Meter	0	0	41,000				
Total		0	0	41,000				
SBU								
Packaging material	Tonnes	6,691	7,356	6,925				
Total		6,691	7,356	6,925				

Sustainable value is the key material selection criterion at Mahindra. We constantly look for newer, more incremental manufacturing processes and innovative technology to reduce our material consumption.



### **PACKAGING**

M&M uses packaging which reduces the environmental impact and ecological footprint. Though it contributes only a small percentage of the total footprint compared to other things such as transportation, water and energy use, it is part of the overall sustainability at Mahindra.

We continue to make our packaging costeffective, convenient and eco-friendly to ensure optimal environmental performance and enhance the productivity of resources by diverting them to other areas.

### **SPILLS**

The best way to manage spills is to see that it doesn't occur in the first place. We take requisite preventive steps to mitigate the risk of spillage and ensure that we handle materials securely enough so as to keep our employees and environment safe.

No significant spill incidents were recorded during the reporting period.

### **COMPLIANCE**

At M&M, compliance is basic hygiene. We not only adhere to laws, regulations, guidelines and specifications relevant to our business, but adopt a more ambitious approach and go beyond what is required. We manage compliances in environment, health and safety, and upgrade continuously through internal audits.

In the reporting period, we incurred no fines from any regulatory authority for non-compliance of laws and regulations.

### WASTE

Waste is the output of the raw material we use to manufacture goods. Every manufacturing process leaves waste which needs to be managed efficiently. M&M follows a dual approach for waste management. First, we focus on using less and wasting less, and second, putting the waste to productive and profitable use and maximising the value we create for our stakeholders. Even then, if we are still left with additional waste, we dispose it responsibly and in compliance with the rules and regulations of the state and pollution control board.

### **Waste Generated**

Waste Type	Unit	2015-16	2016-17	2017-18			
AD							
Hazardous Waste							
Solid	Tonnes	2,283	2,444	2,501			
Solid	Nos.	106,055	116,574	60,882			
Liquid	KL	18,645	214	240			
Non-Hazardous Waste							
Solid	Tonnes	40,895	39,984	42,294			
Solid, Tyres, Drums, etc.	Nos.	36,692	37,822	16,013			
FD+SD							
Hazardous Waste		1					
Solid	Tonnes	858	980	1,340			
Solid	Nos.	29,129	26,181	91,734			
Liquid	KL	160	103	83			
Non-Hazardous Waste							
Solid	Tonnes	8,120	46,659	49,305			
Solid, Tyres, Drums, etc.	Nos.	2,068	20,536	26,649			
SBU							
Non-Hazardous Waste							
Solid	Tonnes	2,157	1,632	1,934			
MRV							
Hazardous Waste	T	4.5	25	20			
Solid	Tonnes	15	25	29			
Liquid	KL	116	48	0			
Liquid	Tonnes	0	0	40			
Non-Hazardous Waste		ı					
Solid	Tonnes	695	744	994			
Solid	Nos.	0	79	59			
CORPORATE CENTRE							
Non-Hazardous Waste	Tannas	0	0	7.4			
Solid	Tonnes	0	0	74			

Waste management is a comprehensive process at Mahindra, conducted in a socially responsible and environmentally sound manner.

Mahindra as a Group is committed to minimise the amount of waste that enters landfills from its operations. M&M has been introducing a Zero Waste to Landfill programme in its plants to not only improve the efficiency in manufacturing processes but also save physical and financial resources through energy conservation and reuse of raw materials. This year, due to increased production activity and enhanced data capturing mechanisms, there is a marked increase in the waste generated, especially for FD+SD.

The practice of using waste as a valuable resource enables us to foster a circular economy which creates synergy between neighbouring industries both within and outside the Group.



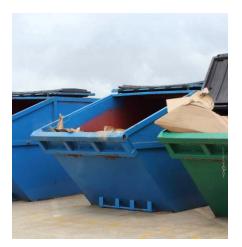
### **Hazardous Waste Disposed to Landfill**

Waste Disposed	Unit	2015-16	2016-17	2017-18	Target 2017-18
Total Waste Disposed	Tonnes	3,179	3,458	1,773	2,594

We surpassed the target for hazardous waste disposal to landfill for FY 2017-18. Against the target of 2,594 MT for FY 2017-18, the waste disposal stood at 1,773 MT. The amount of waste disposed was down close to 50% compared to previous year's 3,458 MT.

This year we began recycling of our hazardous waste instead of sending it to landfill or incineration. Some locations are now sending their hazardous waste to authorised recycler and some are sending for co-processing to cement industries.

The total hazardous waste generated in the current year was 3,695 MT, out of which 1,922 MT was recycled.



### INITIATIVES

### **ENSURING ZERO WASTE GOES TO LANDFILL**

M&M follows a zero-waste philosophy and manages waste at every stage in hierarchy, right from prevention to minimisation, reuse, recycling, energy recovery and disposal. As part of this philosophy, five different plants were certified as zero waste to landfill in the reporting period.

AD Igatpuri plant became the 1st plant in India and 2nd in the world to be certified as Zero Waste to Landfill by Intertek, USA followed by AD Haridwar, AD Zaheerabad, Farm Division-Zaheerabad, and Swaraj Plant 1.

The AD Igatpuri plant has a diversion rate exceeding 99% (landfill waste is less than 1% of total waste). The entire data of land diversion is 99.72% and it was verified by certifying agency M/s Intertek, USA.



### ONE MAN'S SCRAP IS ANOTHER MAN'S TREASURE

MVML, in co-ordination with Spares Business Unit (SBU), came up with a unique initiative to utilise scrap packaging wood generated at MVML for the SBU division. MVML generates around 1,200 tons of scrap packaging wood per annum.

After refurbishment/conversion at vendor's end, an estimated 600 tons can be reused with an annual savings potential of around INR 50 to 60 lakhs. The team conceptualised the project after site visit, feasibility study and testing of sample.

The annual estimated potential of Phase I would be around 14 tons, yielding benefits of INR 4.5 to 5 lakhs to SBU, avoiding direct purchase of fresh boxes.



### OTHER KEY INNOVATIONS IN WASTE MANAGEMENT

- Scrap metal to transformer core
- · Foundry waste sand to river sand
- · Kitchen waste to fertilisers
- · Paint sludge as fuel to cement plants



CASE STUDY - CARBON PRICE

# Towards Carbon Neutrality

### CHALLENGE

M&M contributes half of the Group's revenue and the Group's greenhouse gas emissions from its automotive (SUVs, commercial vehicles), farm equipment (tractors), and agricultural businesses. The challenge is to reduce the greenhouse gas emissions and get on the side of achieving future carbon neutrality.

#### ACTION

In October 2016, M&M became the first Indian company to launch an internal carbon price of \$10 per metric ton to reduce the company's carbon footprint and help meet its goal of reducing its greenhouse gas emissions intensity by 25% by 2019 from 2015–2016 levels.

The funds collected from the carbon price are allocated to projects under two major action areas:

- carbon (renewable energy, LED lighting, energy-efficient motors and HVACs, efficient buildings and infrastructure)
- waste (waste-to-energy projects)

These projects help reduce M&M's scope 1 and scope 2 emissions from its offices and 17 manufacturing units across India.

The carbon price will be re-evaluated every three years in line with M&M's greenhouse gas goal-setting cycle as part of what the Company calls a 'promise cycle'. Moving forward, M&M plans to closely align its internal carbon pricing practices with the Mahindra Group's long-term carbon neutrality goal and expand the carbon price programme to other companies within the Group.

In April 2016, M&M became the first Indian company to sign EP100 initiative, pledging to double its energy productivity by 2030 from 2005 levels.

### OUTCOMES



- Since the adoption of the carbon price in October 2016, M&M has increased its investment in energy efficiency and renewable energy projects, including a 4.2 MW wind energy project, compared with its 2015 'business as usual' levels.
- The Company plans to add renewable energy projects in its new fiscal year.
- The carbon price also aligns with The Mahindra Group's 'Rise Philosophy,' in which an essential purpose of the business is to drive positive change across stakeholders and communities, enabling them to rise.

CASE STUDY - WATER

# Towards A Positive Future AD Igatpuri

### CHALLENGE

Manufacturing process of most goods require water. To be able to do business sustainably, water needs to be managed well.

### ACTION

With the objective to combat water-related business continuity risk and create a positive future, M&M is making each of the plant self-sufficient in water. As part of this strategy several interventions were taken up at the AD Igatpuri plant including efficiency improvements, Kaizens, rainwater harvesting, micro irrigation, recycling, etc. in FY 2015-16.

These interventions helped AD Igatpuri plant to achieve a new milestone in their sustainability journey in 2017. The plant was able to save more water than what they consumed from external sources. A two-day onsite assessment was carried out by Bureau Veritas India Pvt. Ltd. which certified it as a 'Water Positive Plant'. Bureau Veritas is a global leader in conformity assessment and certification services.

### OUTCOME

AD Igatpuri became the first plant in Mahindra to be certified as water positive.

The water consumption levels for the plant in FY 2016-17 stood at 46,613 m³ from external source, whereas water saving was

51.693 m<sup>3</sup>

### Other Initiatives

- Rainwater harvesting of 3.8 lakh m<sup>3</sup> in the last 5 years equivalent to requirement of 19,280 households
- Rainwater harvesting at SD Plant 1, Kandivali & Zaheerabad
- Recycling and reuse of ETP water in process
- Water consumption reduction in new paint line
- Water footprint reduction; FD: 28%, SD: 42% compared to FY 2016-17

3

CASE STUDY - ENERGY

# Sun is Powering the Valley | MRV

### CHALLENGE

Meeting the growing demand for energy in an environmentally safe and responsible manner is a key challenge. Mahindra Research Valley is focusing on alternative energy to reduce carbon emissions and cut power costs, diversify energy supply to make it more sustainable and as a hedge against future energy market volatility.

#### ACTION



Mahindra Research Valley inaugurated its onsite 420 KW solar power plant to cater to a portion of its power requirement through green energy.

Spread over an area of 4,200 sq. metres, the installation offers a covered car parking to the employees as an added benefit. Installed on Opex model, the structure is capable of withstanding a wind speed of 180 kmph and will **generate 7.25 lakh units per annum.** This along with earlier installations will increase green power in the total energy mix. MRV availed the services of Mahindra Susten and M/S Aspiration Energy Private Limited for the installation of the power plant.

### OUTCOME

Besides providing energy security, cutting down on emissions and the cost, the power from alternative sources will now cater to 4% of the MRV's energy requirement.

MRV's total energy generation for FY 2017-18 is estimated to reach

# 115 lakh units per annum

### **GOING AHEAD**

- 275 KW solar power project which will take the share of green energy to 5%
- World Resources Institute and Mahindra World City are in talks to set up wind-based power plant with an aim of converting 10% of its energy requirements to clean energy



### CASE STUDY - WASTE

### Turning Agriwaste into Fuel

### CHALLENGE

India produces millions of tons of crops every year which leads to tons of agriculture waste including rice straw, sugarcane bagasse, coconut shell and others. Disposing this waste safely without causing air pollution is a challenge.

#### ACTION

Indraprastha Gas Limited (IGL), the largest CNG distribution company of India, entered into a Memorandum of Understanding (MoU) with Mahindra Waste to Energy Solutions Limited (MWTESL), a subsidiary of Mahindra & Mahindra Ltd. to provide a solution to agri-waste management and stubble burning through design and development of biogas plants.

These biogas plants will use agro and other organic waste in Delhi and other cities in the region where IGL operates. IGL currently supplies CNG and PNG to Delhi, Noida, Greater Noida, Ghaziabad and Rewari with plans to start operations in Gurugram and Karnal shortly.

The project aims to convert paddy/wheat straw into bio-CNG. In addition to alleviating the ill effects of stubble burning on the environment, this project will also add to the income of the farmers in the region.

### **EXPECTED OUTCOMES**

- The plant is proposed to be developed with state-of-the-art technology provided by Mahindra and will aim to resolve the woes of waste management which is a huge problem for the country.
   The bio-CNG generated will be used to power vehicles and for electrifying farm and household appliances.
- The manure generated as a byproduct will be used as organic fertiliser for farm cultivation by farmers which will help improve soil fertility as it will negate the requirement of chemical fertilisers.

### SOCIAL PERFORMANCE



# MANAGEMENT APPROACH

Our performance on our social impact is an integral component of our business, and being accountable for our legal, ethical and economic responsibilities is indispensable in this regard.

These relationships involve shared values between our organisation and people, and they materialise in our various community projects that are built on the reputation and trust we have developed over the years.

While financial performance has always been a very important parameter for judging corporate success, we also undertake the responsibility to look beyond profits and try to amend some of the anomalies that exist in our social and environmental framework.

At Mahindra we have been sensitive to this responsibility and have consistently addressed the 'People' and 'Planet' related issues to the best of our abilities. This responsibility- for social capital, for value creation, and for economic health- is a genuine and wholesome leadership skill. We see it as corporate social responsibility in its purest form.

Being conscious of our contributions to society and communities, results in favourable cause and effect chains, with the communities being advocates of our Company and the increased ability in acquiring new customers, especially in emerging markets. This leads to both societal development and growth in business.

### **CSR HIGHLIGHTS FY18**

### **CSR** Investment

# million

### Education

girls supported under Nanhi Kali programme; an additional 10,007 adolescent girls were supported through the N Star Life Skills Centres

### Livelihood Training & Placements

youth placed through the Mahindra Pride Schools

trained through the Mahindra Pride Classroom model

#### Environment

5.38 million saplings planted under Project Hariyali

### **Public Health**

7,641

people received medical & diagnostic services through the Lifeline Express at Ratlam

### Rural Development

farmers from 79 villages in Wardha, Maharashtra benefited from the comprehensive agrarian solutions offered through the Wardha Farmer Family Project

### Water Infrastructure

people benefited through Integrated Watershed Management Programme in 48 villages in Bhopal and Hatta, resulted in increased agricultural productivity and improved living standards

### Road Safety

reduction in fatalities on the Mumbai Pune Expressway, Maharashtra due to concentrated efforts in the 4E's of Road Safety

### **Esops - Employee Volunteering**

volunteers

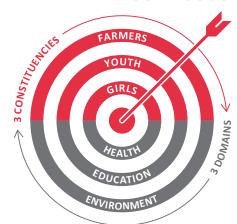
# CORPORATE GOVERNANCE

At Mahindra, we see Futurise as our platform to augment efforts in building a brighter future, not just for us but also for the communities where we operate. Each year, we strive to do better to uplift quality of lives through inclusive development and we are fully equipped to create maximum impact where it matters most.

Investing in strong, long term relationships with all our stakeholders is crucial in instilling trust and also to gain valuable insights into the opportunities and obstacles that exist with each of them. Meaningful business and social outcomes can be achieved by working together with our stakeholders towards sustained value. We take sustainability into account, because businesses need to go on beyond the lifetime of the people who run it presently. Working closely with our stakeholders has created a closely bound, interconnected framework, that acts as a hedge against future risks, while also functioning as an accelerator to achieve equitable business development.

This reporting period, through our CSR initiatives, we have reached out to wider communities with deeper engagements.

### ■ MAHINDRA CSR FOCUS



### ■ WHO DOES IT

- Board CSR Committee
- CSR Council
   CSR Department
- Esops Employee Volunteering Programme
- Key Implementing Partners -**Corporate Foundations** 
  - K C Mahindra Education Trust
- Mahindra Foundation
- Naandi Foundation
- Other NGOs Registered not-for-profits having a minimum of 3 years' experience of undertaking projects on any issue

# **WE DO IT**

At M&M, fortifying the community bottomline is as imperative as strengthening our business bottom-line.

Our innovative social interventions are designed through 'Alternative Thinking', derived from need-based assessments aliqued to our long-term business strategies. This structured approach enables us to draw insights and develop effective initiatives which drive positive change.

### RECOGNITION **AND ACCOLADES**

### **Socially Aware Corporate for the**

**Year 2017** by Business Standard for Zero Fatality Corridor Project on Mumbai Pune Expressway

### **Corporate Citizen of the Year 2017**

by Economic Times for Nanhi Kali and Integrated Watershed Management Programme at Damoh, MP

### **FICCI Road Safety Analysis & Action**

**Award** for Zero Fatality Corridor project on the Mumbai Pune Expressway



### The CSR Journal Excellence Award

for Agriculture & Rural Development for Integrated Watershed Management Programme at Damoh, MP

### **Energy and Environment Foundation** Global CSR Award for Zero Fatality

Corridor Project on Mumbai Pune Expressway

### **■ CSR POLICY**

The CSR Policy has the following objectives:

- Promote a unified and strategic approach to CSR across the Company by incorporating under one 'Rise for Good' umbrella the diverse range of its philanthropic giving, identifying select constituencies and causes to work with, thereby ensuring a high social impact
- Ensure an increased commitment at all levels in the organisation, by encouraging employees to participate in the Company's CSR and give back to society in an organised manner through the employee volunteering programme called Esops

### **■ CSR GOVERNANCE**

At M&M, sustainability is embedded into our business and is an integral part of our business value system. Spearheaded by our top management, our CSR governance is cascaded down to every employee across the company.

Diligence, transparency, and ownership are top priorities for The Mahindra Group's CSR council. A CSR committee has been constituted at the Board of M&M, to monitor the implementation of the policy, approve CSR investments, and undertake periodical assessment of the activities.

# KEY IMPLEMENTING PARTNERS

It is not just about innovative boardroom plans, but also about implementing them on ground to make a difference. To facilitate effective execution of our CSR strategies, it is important to connect with the less privileged sections of society, identify their issues, and develop concentrated interventions to ensure efficacy where it matters.

M&M works in tandem with several organisations, which help effectuate initiatives, monitor programmes, evaluate results, and keep the shareholders updated with the status. The focus areas of these institutions are specific to their scope of work. They are:

- Education Livelihoods
- Skill Enhancement and Vocational Training
- Environment and Rural Development
- Health and Sanitation
- Empowering Differently-abled Individuals
- Relief and Rehabilitation

### **Mahindra Foundation**

Set up in 1969 the Mahindra Foundation focusses on providing relief to the poor, education and encouragement of healthy sports and physical fitness, medical relief and family planning.

### K.C. Mahindra Education Trust

K.C. Mahindra Education Trust (KCMET) was set up in 1953 with a vision "To transform the lives of people in India through education, by providing financial assistance and recognition to them, across age groups and income strata"

KCMETs programmes include education initiatives such as 'Scholarships and Grants' which have enabled over 25,000 students to fulfill their educational goals, 'Skilling Programmes' which have trained over 90,000 youth and 'Project Nanhi Kali' which has provided educational support to over 350,000 underprivileged girls till date. Through these programmes the KCMET has helped deserving and needy students rise above their limiting circumstances.

### **■ KEY CSR PROJECTS**

### **EDUCATION**

### PROJECT NANHI KALI

Project Nanhi Kali was set up by Anand Mahindra (Chairman, Mahindra Group) in 1996, to provide primary education to underprivileged girls. Since 2005, the project is jointly managed by the K.C. Mahindra Education Trust and Naandi Foundation.



# In FY18, the project supported the education of

### girls across 12 states of India

Of these 14,843 girls were supported by M&M Ltd., while the Mahindra Group as a whole supported 61,284 girls making it the single largest donor of the Project. The remaining girls are supported by 8,961 donors (both individuals and corporates).

### Investment

### INR 234.2 mn

(Please note 94.6 million is M&M's spend, the Mahindra Group's is 234.2 million) The programme provides 360-degree support to girls from grade 1 to 10 including:

- 2 hours daily free remedial classes beyond school hours, where trained tutors engage the girls in concept based learning
- A school supplies kit consisting of uniforms, personal clothing, shoes, socks, notebooks, stationery, a school bag, pullover/raincoat & feminine hygiene material
- Provision of digital tablets with pre-loaded educational content (both audio and video) for girls studying in secondary school. The audio-visual content enables better comprehension and recall. Each concept taught is followed by an assessment, and only after the concept is mastered the next concept gets unlocked
- Nanhi Kali team works extensively with parents and communities to sensitise them to become collective guardians of the girls and create a conducive, girl-friendly environment for every Nanhi Kali in some of the most challenging areas across India

#### Key project outcomes:

- Currently supporting the education of 143,992 Nanhi Kalis across 5,125 Academic Support Centres through a cadre of 4,200 trained Nanhi Kali tutors
- Project Locations: In 12 states Andhra Pradesh, Delhi, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, Telangana, Uttar Pradesh, Karnataka and West Bengal
- Digital tablets provided to 49,000 girls at secondary school level
- Noteworthy outcomes of the project include reduced dropout amongst girls which is less than 10% in our project areas, improved learning outcomes year on year and increased attendance
- Over 8,962 donors (of which 395 were corporate donors) have donated to support the education of Nanhi Kalis
- Till date, 15,287 Nanhi Kalis have successfully completed their education till grade 10

### N STAR CENTRES

Project Nanhi Kali has over 20 years of experience working with girls, which has provided significant insights on how adolescent girls require special attention beyond the educational support they received from Project Nanhi Kali till the age of 15 years. The project has set up N Star Centres to provide safe spaces to adolescent girls within their communities where they are mentored and counselled.

These centres train adolescent girls in 21st century skills such as spoken English, financial and computer literacy, health and nutritional awareness, and physical fitness. More importantly the N Star Centres provide a platform to the girls where they can network and team up to tackle any real-life

challenges, at an age when they are especially vulnerable to underage marriage, gender discrimination and abuse.

#### IMPACT

Currently, there are

# 73 N Star Centres 10,007 learners

Of these, 25 N Star centres were sponsored by the Mahindra Group which benefited 5,066 learners.



From being an education support program,
Project Nanhi Kali has today evolved into a comprehensive program that addresses a wide gamut of activities that guarantee social justice to underprivileged girls.

### SCHOLARSHIPS & GRANTS

M&M has set up a variety of scholarship programmes, which range from providing opportunities to youth from low income group families to undergo diploma courses at vocational educational institutes, to allowing meritorious students to pursue their postgraduate studies at reputed universities overseas as well as pursue studies at the Mahindra United World College in Pune.

While some of these were instituted way back in the mid 1950s, others were founded more recently, a proof of the Company's continuous efforts to bring about social and economic development through a literate, enlightened and empowered populace.

### GYANDEEP

Education is a core focus area for CSR at M&M and across the country. Various programs are implemented by employees in tandem with policy and the CSR Department. E.g. initiatives in schools include digital learning, career guidance, mentoring, donation of books & stationery, implementation of abacus learning modules and overall enhancement of school infrastructure.

### MAHINDRA SAARTHI ABHIYAAN

Initiated in 2015, the Mahindra Saarthi Abhiyaan encourages daughters of truck drivers to aspire to study beyond Class 10. The project provides girls who have successfully completed Class 10, scholarship support for higher studies. Till date 3,408 scholarships have been awarded.

### BAJA - PROJECT BASED LEARNING OF AUTO ENGINEERING CONCEPTS

Baja is an intercollegiate design competition organised by the Society of Automotive Engineers (SAE). Teams of students from universities all over the world design and build small off-road cars.

As of 2018 the engine has been an unmodified Briggs & Stratton Model 19 Vanguard engine single-cylinder with a displacement of 305cc and power output of approximately 10 bhp (7.5 kW).

The goal in Baja racing is to design, build and race off-road vehicles that can withstand the harshest elements of rough terrain. Dynamic events are usually held on the final two days of the competition that include Acceleration, Hill Climb or Traction Event, Manoeuvrability Specialty Events (Rock Crawl, Mud Bog, and Suspension) culminating into an endurance race on the second day. The event in FY18 saw a participation of 9,700 college students.



### A WORLD IN MOTION (AWIM) -PROJECT BASED LEARNING OF MECHANICAL CONCEPTS

A World in Motion curriculum brings together teachers, students, and industry volunteers in an exploration of physical science while addressing essential mathematic and scientific concepts and skills. Industry volunteers play an essential

role in motivating the next generation to pursue careers in science, technology, engineering and math by bringing their everyday experiences into an AWIM classroom. Class V & VI students are provided a platform that allows hands-on experience of mechanical concepts for building vehicles for road and water.

The event in FY18 saw a participation of



### SOCIAL AMBASSADORS PROGRAM

The Social Ambassadors Program is a 'Career Discovery Initiative' for students in municipal and low-income private schools. It is implemented by trained Mahindra employees who enable students in 9th & 10th grade to explore the 'World of Work'. Program-aids such as career-specific videos, games and activities are used to help students discover various career options. Aptitude and interest tests are carried out for the students by an agency with careerguidance expertise which enables students to identify their strengths and areas of development.

134 Social Ambassadors (Volunteers) were on-boarded across the Mahindra Group and 3,680 students, across 32 schools in Mumbai, Thane, Khopoli and Nasik, benefited from this program in FY 18.



### SKILLING

### MAHINDRA PRIDE SCHOOLS (MPS)

The Mahindra Pride Schools provide livelihood training to youth from socially and economically disadvantaged sections of society (SC/ST/OBC) to make them employable. The 90-day intensive programme provides domain specific training in 4

verticals- IT enabled services (ITES), Customer Relationship Management, Hospitality Sector & the Automotive Sector (Service Advisor and Service Technician). In addition, Mahindra Pride School students receive training in grooming & soft skills including spoken English, computer applications, values and personality development.



### Investment INR 80 million

Currently the Mahindra Group runs 9 Mahindra Pride Schools which are located in Pune, Patna, Chandigarh, Hyderabad, Srinagar, Varanasi and in Chennai which has 3 Mahindra Pride Schools.

As of March 31st, 2018,

### 26,674 youth

from socially and economically disadvantaged communities were trained and

100%

of these students have been placed in lucrative jobs with reputed companies.

6,323 youth were trained and placed in the financial year 2017-18 alone. The largest number of Mahindra Pride students (61%) have been placed in the IT sector which apart from offering the highest pay packages offer great prospects of career progression.

Besides 100% placements, the highlight of the placement process has been a consistent increase in average starting salary per batch to over Rs. 12,000 per month currently. The highest starting salary per month for placements within India is above Rs. 25,000 and Rs. 45,000 per month for those who have been placed overseas. The program partners with over 200+ companies and the increasing number of repeat recruiters bear testimony to the quality of training provided by the Mahindra Pride Schools.

### MAHINDRA PRIDE CLASSROOMS

In addition to the 9 Mahindra Pride Schools, the Mahindra Pride Classrooms have been rolled out in a number of Polytechnics and Arts & Science Colleges with the objective of scaling up and reaching out to a larger number of students in the most cost efficient manner. By partnering with state governments and private educational institutions, classrooms in these institutions have been dedicated to Mahindra Pride Schools for skill upgradation of the students.

In FY 18, 41,687 students were trained through 955 Mahindra Pride Classrooms conducted through Polytechnics and Arts & Science Colleges in 9 states. From inception in FY 17 till date, 66,677 have been trained in over 1,000 Mahindra Pride Classrooms.

The Mahindra Pride Classrooms provide 40-120 hours of training to final year students covering English Speaking, Life Skills, Aptitude, Interview, Group Discussion and Digital Literacy.

### HUNNAR

Aligning with the Government's focus on skill development, various programmes in rural India and with ITI's have been taken up for skill based training of youth through courses in auto sales & service, diesel generator training, computer training, tailoring and overall personality development courses. Additionally, upgradation of learning facilities in ITI's and training of faculty will enhance learning capacities of students and make them 'Shop Floor' ready for today's industries.



# 4.930

beneficiaries have been impacted in the states of Rajasthan, Uttar Pradesh, Madhya Pradesh, Haryana, Tamil Nadu, Maharashtra through various programmes.

### **PUBLIC HEALTH**

### LIFELINE EXPRESS

A Hospital on Wheels catering to the medical needs of rural people who don't have access to quality medical facilities. Diagnostic, medical and surgical treatment for preventive and curative interventions e.g., cataract, cleft lip palate, breast, cervical & oral cancer screening and surgery, epilepsy counselling and medication and dental & deafness correction.

7,641

people have received medical and diagnostic services in FY 18, through the Lifeline Express at Ratlam, Madhya Pradesh.



### SEHAT

The programme provides ambulance services, mobile dispensaries, medical camps, cancer care, holistic HIV-AIDS, mother & child care services, immunisation outreach, nutritional support, access to safe drinking water, awareness sessions, pest control services, and various infrastructure developments.

### 348,962

individuals in Maharashtra, Uttarakhand, Telangana, Rajasthan, Tamil Nadu, Chandigarh, Uttar Pradesh, Assam, Odisha, Madhya Pradesh have benefited from the programme in FY 18.



### SWACHH BHARAT ABHIYAN

Aligned with the Government's Clean India Campaign, the programme focusses on cleanliness drives and construction of toilets.



# 670 toilets have been constructed in FY 18 benefiting 131,342 people

This was implemented in the states of Maharashtra, Uttarakhand, Telangana, Rajasthan, Tamil Nadu, Chandigarh, Uttar Pradesh, Assam, Odisha, Madhya Pradesh, West Bengal.

### JEEVANDAAN

While the Blood Donation programme primarily includes augmenting the Blood Banks's reserves, providing 100% of blood requirements for people suffering from thalassemia is a focussed programme.

The programme reached out to

beneficiaries in Maharashtra, Uttarakhand, Telangana, Rajasthan, Tamil Nadu, Chandigarh, Uttar Pradesh, Assam, Odisha, Madhya Pradesh.

### NAVDRUSHTI

The programme aims to create ZERO Cataract Villages, which includes awareness drives, eye testing, distribution of spectacles and cataract surgeries for deprived sections of society.

The programme had

beneficiaries in Maharashtra, Uttarakhand, Telangana, Rajasthan, Tamil Nadu, Chandigarh, Madhya Pradesh.

M&M through the Mahindra Foundation has provided funding support for setting up of a Head and Neck Cancer Institute (which is a Public Private Partnership with BMC and CanCare Trust) along with supporting initiatives to provide care to critical patients suffering from cancer and other life-threatening illnesses through the Karo Trust and Palcare.

### **ENVIRONMENT**

### PROJECT HARIYALI

The Mahindra Hariyali programme is yet another initiative that has been highly successful due to the employee volunteering platform. In FY 18 **Mahindra and Mahindra Ltd. planted 149,019** saplings in the states of Andhra Pradesh, Maharashtra, Uttarakhand, Telangana, Tamil Nadu, Rajasthan, Chandigarh and Madhya Pradesh. Mahindra Group planted

15,38,172 saplings in FY18



### **ARAKU PROJECT**

Tree plantation to increase green cover and improve livelihood of farmers.

In FY 18 the project planted

# 1.5 million trees This CSR grant enabled the planting of 1,094,724 trees

in the tribal Araku valley belt

### **EHS+ CENTRE**

Located in Pune, Maharashtra, the India EHS+ Centre is housed within Symbiosis International University's renowned Symbiosis Institute of International Business (SIIB). The Center offers world-class training on various Environment Health & Safety (EHS) topics that address everything from the basic fundamentals of EHS to niche topics specific to particular industries. All courses are tailored to meet the needs of Indian factories and industries. The Company has partnered with Institute for Sustainable Communities (ISC) in this initiative.

2,300+
have been trained since 2015



### **GREEN GAURDIANS**

Various environment friendly programmes have been taken up under the banner, promoting green energy through collaboration with IITM's (Institute of Technology, Madras) Centre for Battery Operation (COE). Through the collaboration, IITM is focused on research and development of a 'highly efficient battery for automobiles'.

Promoting e-mobility services for the specially-abled through the Electric Taxi Service that is two-fold; green transport and customised and user-friendly taxis for specially-abled people. Also, promoting use of biogas produced from food waste at the Mahindra Research Valley, Chennai and a leprosy hospital in Maharashtra.

Direct impact to

2,900

beneficiaries with a reach across the states of Tamil Nadu, Karnataka and Maharashtra.

### **RURAL DEVELOPMENT**

### VILLAGE SOCIAL TRANSFORMATION MISSION

Supporting holistic development of 1,000 villages in Maharashtra to plug developmental gaps and collectively partake in nation building.

### GRAM VIKAS

Integrated Village Development including water management through revival / reconstruction of water structures and access to Government schemes like the Pradhan Mantri Ujwala Yojana.

33,701 beneficiaries and across Maharashtra & Telangana

### KRISHI MITR

Rural development programme aimed at improving income generation for farming communities.

The programme includes micro nutrient soil testing, advisory services, drip irrigation, agri extension services, dairy farming, permaculture farming, infrastructure development and capacity building resulting in improvement in agricultural productivity.

23,930

beneficiaries across Maharashtra, Madhya Pradesh, Rajasthan, West Bengal and Odisha.



# ESOPS - EMPLOYEE SOCIAL OPTIONS

Esops, Mahindra's ongoing Employee Volunteering Programme, is a set of volunteering options for social work, which are created and implemented exclusively by the employees, based on the needs of the communities in and around their areas of operation. For a Mahindra employee, it implies looking beyond oneself to help the less fortunate. It means sharing one's skills to make the society healthier, cleaner, greener, more literate and, hence, more sustainable.

A company's commitment to CSR is positively linked to the employees' commitment to the organisation. When employees are able to find greater meaning in their work, it helps create a positive impact on their professional attitude toward the company and increases their productivity greatly.

The Esops volunteers devise yearly strategies, design projects, execute them at the ground level, and monitor them closely to ensure desired results. In some projects, our volunteers also engage their family members in the numerous activities.

Esops extends across most states in India. Every year, Esops has seen a consistent rise in the number of volunteers and the spirit of employee participation at M&M.

#### In FY 18,

Mahindra & Mahindra Ltd.

Esops volunteers: 20,272 Esops person hours: 148,112

Mahindra Group

Esops volunteers: 69,274 Esops person hours: 409,078

### FROM ENGAGEMENTS TO OUTCOME



We constantly align the scope and scale of our Esop programmes to the identified community priorities. Our social welfare initiatives go beyond just regular meaningful engagements to consistent measurable outcomes. Our employee volunteers are extremely passionate and enthusiastic in their approach towards their contributions to societal welfare.



The Esops Awards Competition was held on 9th August 2017 at the Group Corporate Office in Worli. It was a day of healthy competition, excitement and intellectually stimulating dialogue regarding Corporate Social Responsibility and employee volunteering projects taken up across various sectors in the Mahindra Group.

### This year, we received 23 applications from both factory and non-factory locations.

The jury comprised of distinguished personalities from the social and developmental sectors. They included Ms. Sanjna Kapoor, co-founder of Junoon, a theatre and arts organisation, Mr. Shishir Joshi, CEO of the non-profit Mumbai First and Professor Surinder Jaswal, Ph. D (London University), Deputy Director and Dean, Research and Development, TISS. The jury showed great interest in the projects undertaken by the shortlisted Esops teams. An invigorating question and answer session after the presentations left the jury members in a tough spot to decide the winners.



### WINNERS

### **Non-Factory Location**

### Mahindra Susten Pvt. Ltd.

for their efforts in landmark changes in rural education.

### **Factory Location - Joint Winners**

AFS, Auto Division, Igatpuri for plastic bottle free environment and AFS, Auto Division, Nashik for working with thalassemia



# CULTURAL CONTRIBUTION

Cultural activities bring people together to celebrate a common cause or interest. Bringing people together, across backgrounds, is something we enjoy participating in. It is with this sentiment in mind, that we regularly host events that we are extremely proud of and hold close to our hearts.



### Mahindra Excellence in Theatre (META)

The week-long festival, designed to showcase the best of Indian theatre, honours all aspects of the art form including playwriting, set design, light and costume design, direction and performance.

This year too, META was a resounding success amongst Delhi thespians and theatre lovers. The META Secretariat received over 300 entries, from 12 Indian states, and as a first this year, the entries were handled digitally. After selections, the audiences enjoyed the works of over 160 artistes, in 5 languages, of which 10 were shortlisted for the awards in 13 categories. META 2017 also conferred the 'Lifetime Achievement Award' upon veteran Marathi theatre exponent, Arun Kakade.

### Mahindra Blues Festival



The Mahindra Blues Festival was back with a bang this year and has truly earned the title of the Biggest Blues Festival of India. Held at the iconic Mehboob Studios, in its eighth magnificent year, the festival featured blues legends John Mayall, Coco Montoya and Walter Wolfman Washington. The festival also played host to Canadian blues powerhouse, Layla Zoe and Mumbai's very own Blackstratblues.

Just like last year, the festival was again conferred a Yale platinum rated green eventhighlighting our ongoing endeavours to be sustainable in all our initiatives.

### Mahindra Sanatkada Lucknow Festival



Aimed at bringing back the famed Lucknowi tehzeeb or culture, the Mahindra Sanatkada Lucknow Festival is a fair celebrating the historic and culturally rich city. The 5-day festival is a celebration of heritage, cuisine, art and craft, held at Baradari, a building specifically constructed by the last Nawab of Lucknow, Wajid Ali Shah.

This year's theme for the festival was Francisi Awadhi Ta'alluqaat (The French Connection with Awadh). At the festival, this theme came to life through an exhibition of rare eighteenth-century paintings from all over the world, lectures on the theme by eminent historians, some of the finest French films, a jazz performance, heritage walks that highlighted the French connection with Lucknow and a delectable array of French cuisine.

### Mahindra Kabira Festival



A fledgling festival in our oeuvre, the Mahindra Kabira Festival's second edition, held at Varanasi is also a platinum rated green initiative. The festival espouses the secular teachings of the Poet Saint Kabir, and aspires to be a beacon of love and hope in the poet's city of birth.

Captivating musical performances started at dawn, with the sunrise proving to be an ethereal backdrop. The festival also featured interesting talks and heritage walks around the historic city. Evenings concluded with more music and soul stirring poetry readings.

CASE STUDY - NANHI KALI

# Wrestling fate for freedom

The hard-hitting reality of our country is that many young girls sacrifice their childhood and are made to balance household work and school work.

With the Nanhi Kali project, we come across many girls whose stories we are able to change. One such example is the story of Amruta Yadav, who lives in Mumbai with her parents and 3 siblings. A hard worker at home and at school, Amruta became a Nanhi Kali when she was in 4th grade.

With the encouragement of her coach Babasaheb Shinde, Amruta also took up wrestling with great interest and vigour. She has trained against odds, including the threat of being married early, to become a competitive wrestler taking on opponents in the 44 kg category even though she was underweight. Her determination has won her accolades and two gold medals at state level tournaments.

Making her parents, coach and teachers proud, Amruta continues to shoulder all her responsibilities with the spirit of a true fighter while she prepares for the National Level Wrestling Championship. Her dream is to one day make her country proud by winning the Olympics, and with the constant support of her coach and Project Nanhi Kali, Amruta's confidence is on the Rise every day.



2

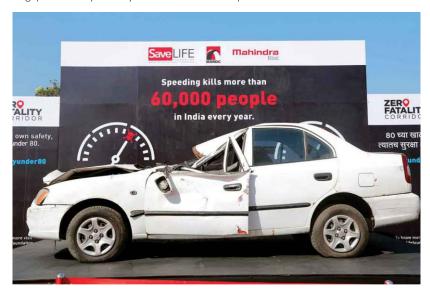
# CASE STUDY - ROAD SAFETY

# Zero Fatality Corridor

The 'Zero Fatality Corridor' project helmed by NGO, SaveLIFE Foundation (SLF) in collaboration with the Maharashtra State Road Development Corporation (MSRDC), was initiated by Mahindra to address the high number of road accidents and deaths on the Mumbai-Pune Expressway.

### From 2010 to 2015, the Expressway saw 4,234 accidents and 1,323 deaths.

Ever since the interventions by the project have taken root, these figures have fallen by 30% in 2018 in comparison to 2017. As per SLF's research, the accidents are linked to gaps in the Expressway's infrastructure and operation.



A 360° intervention based on the 4E's of Road Safety viz engineering, emergency care, enforcement and education began and 15 infrastructural risk factors in over 2,000 spots were identified. Since August 2016, the project began gaining momentum and over a thousand of these spots have been fixed.

Other risk factors that were identified included exposed bridge pillars which have been padded with crash barriers to reduce the impact of a crash, guardrails and improved signages. Factors as basic as large flowerpots on the dividers were also identified as road accident causes and rectified.

Quicker Emergency Response was also highlighted as a factor that needed to be addressed in order to increase survival chances of victims. The response and rescue operations on the Expressway is now far quicker and five '108' ambulances are stationed at different points.

Additionally, a 3,500 square foot MSRDC trauma centre near Talegaon has been set up and bids for its operation have begun.

'Safety Below 80' is the awareness campaign for the Expressway as it was realised that most accidents are results of excessive speeding and going above the set limit of 80 km/hour is the main cause of an accident and fatality.

The campaign saw the placing of real crashed cars on toll plazas to draw attention to the possible consequences of going over the speed limit.

Additionally, radio campaigns aimed at explaining causes of accidents and remedial actions for truckers and motorists were advocated.

# Total Investment INR 35 million

IMPACT

# 14% reduction

in fatalities in FY 18 over FY 17 1,224 drivers trained in FY 18 with 3,247 trained since 2015

CASE STUDY - HARIYALI

# **Planting Since**



Project Hariyali was started with the intent to plant one million trees. 10 years on, and we have exceeded that calculation with 13 million trees today! To mark the special event, the thirteenth million tree, a Rudraksha sapling was planted at Worli by the Honorable Chief Minister of Maharashtra, Shri Devendra Fadnavis.



The speakers at the event included the Chief Minister, Mr. Anand Mahindra and Mr. Rajeev Dubey. Some snippets from their speeches are:

As part of our mission to give Maharashtra a new green cover, we plan to plant 50 crore trees in the next two years and thus plan to take the state's cover to 33%. We intend to plant fruit trees to not just aid tree plantation, but also provide alternative livelihoods to the farmers.

Shri Devendra Fadnavis

Honourable Chief Minister of Maharashtra

We are in the midst of a manmade crisis and it is our duty to strengthen nature's hand to help tackle climate change and meet the commitments of the Paris Agreement. The Mahindra Hariyali programme forms part of our contribution to the cause.

**Anand Mahindra** 

Chairman, Mahindra Group

From transforming an arid hilltop in Nashik to helping Adivasi farmers in the Araku Valley supplement their income through fruit trees, and making a difference in drought-prone Vidharbha, this programme has had a farreaching impact which will be felt for generations to come.

Rajeev Dubey Group President (HR & Corporate Services) & CEO (After Market Sector) Member of the Group Executive Board, Mahindra & Mahindra Ltd.

#### Total Investment

# INR 53.9 million

# IMPACT

In FY18 1.5 million trees were planted through this project. This included 1.09 million trees in the tribal Araku valley belt. Besides providing green cover this initiative provided livelihood support to tribal farmers, as the fruit bearing trees provided shade to the coffee plantations.



Further, the Auto Farm & Agro Sector planted 1,33,619 trees. Location-Maharashtra, Uttarakhand, Telangana, Tamil Nadu, Rajasthan, Chandigarh, Madhya Pradesh & Andhra Pradesh

CASE STUDY - ENVIRONMENT

# Making Sustainability Personal

On the occasion of World Environment Day, Mahindra employees continued with their tradition of "making sustainability personal".

M&M organised LED light kiosks across 18 of our locations pan India, under the UJALA scheme. As per the scheme, 3 products were made available for a 50% lesser cost that included 9w LED bulbs, 20w LED tube lights and 50w 5-star energy efficient ceiling fans.

The response was overwhelming across the locations with a total of 24,000 LED bulbs, 4,000 LED tube lights and 1,500 ceiling fans being sold in 3 days.

This switch to energy efficient appliances will see an overall reduction of energy consumption.

14 lakh units per annum

energy cost saving per annum INR 1 crore

reduction of carbon emission by tonnes annually

Over 39,000 employees and their family members participated in the Sustainability Engagement Competition.

Participants were asked to submit electricity bills between April and September 2016, and their consumption for the same period in 2017 post implementation of sustainable electricity usage. Five winners with lowest consumption numbers were rewarded by having their electricity bills paid for a whole year.



# ANNEXURES

# **ACRONYMS**

ABCI	Association of Business Communicators of India	
ACE	Awards for Customer Excellence	
ACETECH	Architecture, Construction, Engineering Technology	
AD	Automotive Division	
AGC	Avaya Global Connect	
AIDS	Acquired Immunodeficiency Syndrome	
AIMA-IOCL	All India Management Association- Indian Oil Corporation Limited	
ABS	Anti-lock Braking System	
ANM	Auxiliary Nurse Midwife	
AT&T	American Telephone & Telegraph	
ASSOCHAM	Associated Chambers of Commerce and Industry of India	
BCL	Business Continuity Leader	
BCMS	Business Continuity Management Systems	
ВСР	Business Continuity Plan	
BIA	Business Impact Analysis	
BKS	Bharatiya Kamgar Sena	
BMW	Bavarian Motor Works	
вро	Business Process Outsourcing	
BPI	Business Psychologists International	
BR	Business Responsibility	
BS	British Standards	
BSE	Bombay Stock Exchange	
BSS	Business Support Systems	
BS-III	Bharat Stage- three	
BS-IV	Bharat Stage- four	
ВТ	British Telecommunications	
C2 CRDe	2-cylinder Common Rail Diesel Engine	
CO <sub>2</sub>	Carbon dioxide	
3R	Reduce/Recycle/Reuse	
CH4	Methane	
CAE	Computer Aided Engineering	
CCI	Clinton Climate Initiative	
CDP	Carbon Disclosure Project	
CED	Cathodic Electrodeposition	
CEO	Chief Executive Officer	

cgc	Corporate Governance Cell		
CFC	Chlorofluorocarbon		
CFL	Compact Fluorescent Lamp		
CFO	Chief Financial Officer		
CFT	Cross Functional Team		
CGSF	Common Guaranteed Safety Programme		
CLHA	Children Living with HIV AIDS		
CII	Confederation of Indian Industry		
CIO	Chief Information Officer		
СІТИ	Centre of Indian Trade Unions		
СМО	Chief Marketing Officer		
CMTT	Club Mahindra Tusker Trail		
CMVR	Central Motor Vehicle Rules		
CMAI	Communication Multimedia and Infrastructure		
CNG	Compressed Natural Gas		
СО	Carbon Monoxide		
CRISIL	Credit Rating & Information Services of India Ltd.		
CRM	Customer Relationship Management		
CSR	Corporate Social Responsibility		
сто	Chief Technical Officer		
CV	Commercial Vehicles		
D&B	Dun & Bradstreet		
DNA	Data Not Available		
DSIR	Department of Science and Industrial Research		
EBD	Electronic Brakeforce Distribution		
ECM	Energy Conservation Measures		
ECEM	Enterprise Carbon and Energy Management		
EDGE	Enterprise Driving Growth & Excellence		
EDC	Engine Development Centre		
EFI	Employers Federation of India		
ELV	End of Life Vehicle		
EDMC	East Delhi Municipal Corporation		
EPA	Environmental Protection Agency (USA)		
EPC	Engineering, Procurement, and Construction		
ESCo	Energy Services Company		
ER	Employee Relation		

ERP	Enterprise Resource Planning		
ESI	Employment Status Indicator		
ESP	Electronic Stability Program		
ESIC	Employee State Insurance Corporation		
Esops	Employee Social Option Scheme		
ETP	Effluent Treatment Plant		
EU	European Union		
EURO IV	European emission standards- Four		
EURO V	European emission standards- Five		
EVP	Executive Vice President		
EVP	Employee Value Proposition		
FAPCCI	Federation of Andhra Pradesh Chambers of Commerce		
FD	Farm Division		
FE-EVI	Financial Express- Emergent Ventures International		
FICCI	Federation of Indian Chamber of Commerce and Industry		
FIDC	Finance Industry Development Council		
FIFA	Federal International Football Association		
FMS	Feedback Management System		
FTM	First Time Managers		
g/hph	Grams per horse power hours		
GDP	Gross Domestic Product		
GDR	Global Depositary Receipts		
GHG	Greenhouse Gas		
GJ	Giga Joules		
GEB	Group Executive Board		
GMC	Group Management Cadre		
GoB	Government of Bihar		
GPS	Global Positioning System		
GPMD	Global Program for Management Development		
GRI	Global Reporting Initiative		
GRIHA	Green Rating for Integrated Habitat Assessment		
GSM	Global System for Mobile Communications		
H <sub>2</sub> O	Water		
HCFC	Hydrochlorofluorocarbon		
HCNG	Hydrogen Compressed Natural Gas		
HHD	Hand Held Device		
нос	Heat of Compression		
НР	Horse Power		
НР	Horse Power		

HPCL	Hindustan Petroleum Corporation Limited			
HR	Human Resources			
HRD	Human Resource Development			
IBA	International Bird Area			
ICAI	Institute of Chartered Accountants of India			
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics			
ICT	Information, Communication, and Technology			
IDC	International Data Corporation			
IGBC	Indian Green Building Council			
IHECT	International Centre for Hydrogen Energy Technologies			
IIT	Indian Institute of Technology			
IIMM	Indian Institute of Materials Management			
ILO	International Labour Organization			
IMC	Indian Merchant Chamber			
IMDS	International Material Data System			
IMS	Integrated Management System			
INR	Indian Rupee			
IRADe	Integrated Research & Action for Development			
ISO	International Organization for Standardization			
IT	Information Technology			
ITDP	Integrated Talent Development Process			
ITES	Information Technology Enabled Service			
JAU	Junagadh Agricultural University			
JCMM	Jagdish Chandra Mahindra Memorial			
JNNSM	Jawaharlal Nehru National Solar Mission			
KCMET	K.C. Mahindra Educational Trust			
КРО	Knowledge Process Outsourcing			
KL	Kilo Litres			
LBSIMT	Lal Bahadur Shastri Institute of Management and Technology			
LCV	Light Commercial Vehicle			
LEED	Leadership in Energy & Environmental Design			
LED	Light Emitting Diode			
LDO	Light Diesel Oil			
L&D	Learning and Development			
LPG	Liquefied Petroleum Gas			
LSPV	Load Sensing Proportioning Valve			
LTL	Learning to Lead			

MACE	Mahindra Consulting Engineers		
MAITS	Mahindra All India Talent Scholarships		
MBCSPL	Mahindra Business & Consulting Services Pvt. Ltd.		
MCD	Municipal Corporation of Delhi		
MCL	Mahindra Composites Ltd.		
MD	Managing Director		
META	Mahindra Excellence in Theatre Award		
MFCSL	Mahindra First Choice Services Limited		
MFCWL	Mahindra First Choice Wheels Limited		
MFL	Mahindra Forgings Limited		
MFUSA	Mahindra Foundation USA		
MGD	Million Gallons Per Day		
MGTL	Mahindra Gujarat Tractor Limited		
MGTPL	Mahindra Gears & Transmissions Private Limited		
MHIL	Mahindra Hinoday Industries Limited		
MHRIL	Mahindra Holidays & Resorts India Limited		
MIBL	Mahindra Insurance Brokers Ltd.		
MIDC	Maharashtra Industrial Development Corporation		
MIL	Mahindra Intertrade Limited		
MILES	Mahindra Integrated Logistics Execution System		
MIQ	Mahindra Institute of Quality		
MLDL	Mahindra Lifespace Developers Limited		
MLL	Mahindra Logistics Limited		
MMDC	Mahindra Management Development Centre		
MMFSL	Mahindra & Mahindra Financial Services Limited		
MN 25	Mahindra Navistar 25000 kg		
MNAL	Mahindra Navistar Automotives Limited		
MNC	Multinational Company		
MNEPL	Mahindra Navistar Engines Private Limited		
мои	Memorandum of Understanding		
MPD	Magnetic Products Division		
MPS	Mahindra Pride School		
MPTS	Mahindra People Transport Solutions		
MPUAT	Maharana Pratap University of Agriculture & Technology		
MQS	Mahindra Quality System		
MReva	Mahindra Reva Electric Vehicles Pvt. Ltd.		
MRHFL	Mahindra Rural Housing Finance Ltd.		
MRV	Mahindra Research Valley		
MSat	Mahindra Satyam		
MSB	Mahindra Spares Business		
MSOLAR	Mahindra Solar One Pvt. Ltd.		
MSSSPL	Mahindra Sanyo Special Steel Pvt. Ltd.		
MTWL	Mahindra Two Wheelers Limited		

MUSCO	Mahindra Ugine Steel Company Limited		
MVML	Mahindra Vehicle Manufacturers Limited		
MWC	Mahindra World City		
MWCDL	Mahindra World City Developers Limited		
MWCJL	Mahindra World City Jaipur Limited		
NAAQS	National Ambient Air Quality Standards		
NAPCC	National Action Plan on Climate Change		
NASSCOM	National Association of Software & Services Companies		
NATRIP	National Automotive Testing & R&D Infrastructure Project		
NBFC	Non-Banking Financial Companies		
NBC	National Building Code		
NDTV	New Delhi Television Limited		
NGO	Non-Governmental Organisation		
NHRDN	National Human Resource Development Network		
NIS	Not in Scope		
NITIE	National Institute of Industrial Engineering		
NMACS	Networking, Mobility Analytics, Cloud & Security		
NOx	Oxides of Nitrogen		
NOA	National Outsourcing Association		
NRI	Non-Residents of India		
NSE	National Stock Exchange		
NSDF	National Sports Development Fund		
NVG-SEE	National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business		
OECD	Organisation for Economic Cooperation & Development		
OBD	On Board Diagnostic		
ОСВ	Overseas Corporate Bodies		
ODS	Ozone Depleting Substance		
OEM	Original Equipment Manufacturer		
ОТМ	Oracle Transport Management		
OSS	Operations Support Systems		
PAT	Profit After Tax		
PAU	Punjab Agricultural University		
Pb	Lead		
PFOS	Perflourooctane Sulfonates		
PLHA	People Living with HIV/AIDS		
POP	Plaster of Paris		
PRCI	Public Relations Council of India		
PWD	Persons with Disability		
QCD	Quality Cost and Delivery		
QCFI	Quality Circle Forum of India		

RA	Risk Assessment	
RCI	Resort Condominium International	
RBI	Reserve Bank of India	
RIICO	Rajasthan State Industrial Development & Investment Corporation Limited	
RMC	Ready Mix Concrete	
ROI	Return On Investment	
ROHS	Restriction on Hazardous substances	
RRR	Rate and Reusability Rate	
RSPM	Respirable Suspended Particulate Matter	
R&D	Research & Development	
SAP	System Application Products and Data Base	
SAM	Software Analysis and Management	
SCM	Supply Chain Management	
SEZ	Special Economic Zone	
SEBI	Securities and Exchange Board of India	
SIAM	Society of Indian Automobiles Manufacturers	
SIBM	Symbiosis Institute of Business Management	
SLP	Senior Leaders Program	
SLT	Senior Leadership Team	
SOx	Oxides of Sulphur	
SO2	Sulphur Dioxide	
SPM	Suspended Particulate Matter	
SRI	Solar Reflectance Index	
STAT	Statistic	
STAMP	Structural Testing Analysis & Measurement of Projects	
STP	Sewage Treatment Plant	
SUV	Sports Utility Vehicle	

SYMC	Ssangyong Motor Company Limited
SYSTECH	Systems & Technologies Sector
TCF	Trim Chassis Final
TechM	Tech Mahindra
TMF	Tech Mahindra Foundation
TIDCO	Tamil Nadu Industrial Development Corporation
TNAU	Tamil Nadu Agricultural University
ТРМ	Total Productive Maintenance
ТТР	Tertiary Treatment Plant
UAE	United Arab Emirates
UK	United Kingdom
UNEP	United Nations Environment Programme
UNGC	United Nations Global Compact
UNIDO	United Nations Industrial Development Organization
US	United States
USA	United States of America
USD	United States Dollars
UV	Utility Vehicle
UWC	United World College
VAVE	Value Analysis and Value Engineering
VC	Vice-Chairman
VECV	Volvo-Eicher Commercial Vehicles
VFD	Variable Frequency Drives
voc	Volatile Organic Compound
WBCSD	World Business Council for Sustainable Development
wow	Wet On Wet
WRI	World Resources Institute

### **■** GLOSSARY

#### **Biodiesel**

Biodiesel refers to a non-petroleum based diesel fuel consisting of short chain alkyl esters, made by transesterification of vegetable oil.

#### **Biofuels**

Solid, liquid or gas fuel derived from recently dead biological material.

# Carbon Dioxide Equivalent (CDE) and Equivalent Carbon Dioxide (CO2e)

are two related but distinct measures for describing how much global warming a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration of carbon dioxide ( $CO_2$ ) as the reference Equivalent  $CO_2$  (CO2e) is the concentration of  $CO_2$ that would cause the same level of radiative forcing as a given type and concentration of greenhouse gas.

# **C2** CRDe Technology

Two cylinder, common rail diesel engine technology stands for Common Rail Direct Fuel Injection engine. It is the latest state-of-the-art technology for diesel engines and suits passenger cars as well as commercial vehicles.

#### **Carbon Disclosure Project (CDP)**

is an organisation that works with shareholders and corporations to disclose the greenhouse gas emissions of major corporations. M&M Limited is a signatory for CDP.

#### Chlorodifluoromethane (Difluoromonochloromethane)

is a Hydrochlorofluorocarbon (HCFC) commonly used in air conditioning applications.

#### CRISIL Level 1

rating that indicates the company's capability with regard to corporate governance and value creation for all stakeholders is the highest.

### **COPC-2000® CSP Global Standard Certification**

The COPC-2000® CSP Standard is a Performance Management Framework designed to deliver results in Customer Service Provider (CSP) contact centre environments including Call Centres, E-Commerce Centres and Transaction Processing Operations.

# Dichlorodifluoromethane (R-12)

usually sold under the brand name Freon-12, is a chlorofluorocarbon halomethane, commonly known as CFC, used as a refrigerant and aerosol spray propellant. (R-22)- is a colourless gas better known as HCFC-22, R-22. Earlier it was commonly used as a propellant and in air conditioning application. These applications are being phased out its manufacturing was banned in the US and many countries in 1994 due to concerns about damage to the ozone layer.

# ECOTEL® certification

ECOTEL® is a prestigious environmental certification designed by HVS' Sustainability Services specifically for the hospitality sector. This certification recognises outstanding achievement along the triple bottomline: environmental, social and fiscal parameters.

### **End-to-End Supply Chain Solutions**

End-to-End Supply Chain Solutions is the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers. Supply chain management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption.

#### **EURO IV or EURO V Standards**

reduction of pollutant emissions from light vehicles. The European Union is introducing stricter limits on pollutant emissions from light road vehicles, particularly for emissions of nitrogen particulates and oxides. The Regulation also includes measures concerning access to information on vehicles and their components and the possibility of introducing tax incentives.

#### **G4 Guidelines**

are an update and completion of the third generation of GRI's process guidance on how to define the content of a sustainability report.

#### **GRIHA Certification**

GRIHA rating system consists of 34 criteria categorised under various sections such as site selection and site planning, conservation and efficient utilisation of resources, building operation and maintenance, and innovation points. Eight of these 34 criteria are mandatory, four are partly mandatory, while the rest are optional. Each criterion has a number of points assigned to it. It means that a project intending to meet the criterion would qualify for the points. Different levels of certification (one star to five stars) are awarded based on the number of points earned. The minimum points required for certification is 50.

# The Green Home Rating system by IGBC Indian Green Building Council

The green home rating system by Indian Green Building Council (IGBC) is India's first, and is exclusively designed for the residential sector. Different levels of certifications such as Certified, Silver, Gold and Platinum are awarded to a project in recognition of its green commitment.

#### **ISO 27001 Global Certification**

ISO/IEC 27001 is the only auditable international standard which defines the requirements for an Information Security Management System (ISMS). The standard is designed to ensure the selection of adequate and proportionate security controls.

#### ISO-50001

ISO, Standard 50001 specifies requirements for establishing, implementing, maintaining and improving an energy management system, whose purpose is to enable an organisation to follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency, energy use and consumption.

#### ISO 9001:2000

Quality Management Systems directive that provides a number of requirements which an organisation needs to fulfil if it is to achieve customer satisfaction through consistent products and services which meet customer expectations.

#### ISO 14001:2004

international specification for an Environmental Management System (EMS). It specifies requirements for establishing an environmental policy, determining environmental aspects and impacts of products/activities/services, planning environmental objectives and measurable targets, implementation and operation of programmes to meet objectives and targets, checking and corrective action and management review.

#### ISO/TS 16949

quality management system requirements for the design and development, production and, when relevant, installation and service of automotive-related products.

#### ISO/TS 16949:2002

quality management systems – Particular requirements for the application of ISO 9001:2000 for automotive production and relevant service part organisations.

#### The kilowatt-hour

(symbolised kWh) is a unit of energy equivalent to one kilowatt of power expended for one hour of time. kWh is not a standard unit in any formal system, but it is commonly used in electrical applications.

#### OHSAS 18001:2004

an Occupational Health and Safety Assessment Series for health and safety management systems. It is intended to help organisations to control occupational health and safety risks. It was developed in response to widespread demand for a recognised standard against which to be certified and assessed.

#### OHSAS 18001:2007

Managing health and safety (OH&S) issues in the workplace represents an enormous challenge due to varying human nature, skills set, process complexity & local culture and have implications for everyone at the workplace. Effectively managing these issues means taking account not only of legal requirements, but also the well-being of your personnel in the organisation.

# **ODS**

Ozone depleting substances (ODSs) are those substances which deplete the ozone layer and are widely used in refrigerators, air conditioners, fire extinguishers, in dry cleaning, as solvents for cleaning, electronic equipment and as agricultural fumigants.

# **Mahindra Quality Way**

an assessment by external national and international experts of Mahindra's quality policy, systems, procedures and performance against world-class standards to identify: strengths, opportunities for improvement, scoring profile for prioritising improvements.

# **NAAQS**

the clean air act which was last amended requires EPA to set National Ambient Air Quality Standards for pollutants considered harmful to public health and the environment. http://epa.gov/air/criteria.html

#### **NASSCOM**

a not-for-profit was set up in 1988 to facilitate business and trade in software and services and to encourage advancement of research in software technology.

#### Scope I

Scope 1 greenhouse gas emissions occur from sources that are owned or controlled by a company, such as combustion facilities (e.g.: boilers, furnaces, burners, turbines, heaters, incinerators, engines, flares, etc.), combustion of fuels in transportation (e.g.: cars, buses, planes, ships, barges, trains, etc.) and physical or chemical processes (e.g.: in cement manufacturing, catalytic cracking in petrochemical processing, aluminium smelting, etc.).

#### Scope II

Scope 2 GHG emissions are from the generation by another party of electricity that is purchased and consumed by the company. This is described as "purchased electricity" for the purposes of the GHG Protocol.

#### Scope III

Other indirect greenhouse gas emissions, including those associated with employee travel, supply chain, leased assets, outsourced activities, use of products and waste disposal.

#### **SEI-CMMI level 5**

A Level 5 CMMI rating provides the highest recognition to an organisation's software and systems engineering processes.

#### Solar Reflectance Index

Solar Reflectance is the fraction of the incident solar energy which is reflected by the surface in question. The best standard technique for its determination uses spectrophotometric measurements, with an integrating sphere to determine the reflectance at each different wavelength. The average reflectance is then determined by an averaging process, using a standard solar spectrum. This method is documented by ASTM (American Society for Testing and Materials).

#### **Special Economic Zone (SEZ)**

SEZ is a geographical region that has economic laws that are more liberal than a country's typical economic laws.

#### **USGBC LEED Certification**

LEED Professional Accreditation distinguishes building professionals with the knowledge and skills to successfully steward the LEED certification process.

# **United Nations Global Compact**

is a framework for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, the environment and anti-corruption. M&M Limited is a signatory to UNGC.

#### ■ INDEPENDENT ASSURANCE STATEMENT

### Scope and approach

Mahindra & Mahindra Limited - Automotive Division & Farm Division (CIN: L65990MH1945PLC004558; hereafter referred as 'M&M' or 'the Company') commissioned DNV GL Business Assurance India Private Limited ('DNV GL') to undertake independent assurance of sustainability disclosures in the Company's Sustainability Report 2017-18 in its printed format (the 'Report'). Our responsibility in performing this work is regarding verification of sustainability performance disclosed in the Report, and in accordance with the agreed scope of work with the management of the Company. The intended users of this assurance statement are the management of the Company. Our assurance engagement was planned and carried out during November 2017 to August 2018.

Our scope of work was the verification of the qualitative and quantitative information on sustainability performance disclosed in the Report covering Economic, Environmental and Social performance of the activities undertaken by the Company over the Reporting period 1st April'2017 to 31st March'2018. The organizational boundary, as set out by M&M consists of 14 Manufacturing plants; 5 Warehouses, Corporate office, 1 Research & Development facility.

We performed our work using DNV GL's assurance methodology VeriSustainTM, which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements (ISAE) 3000 Revised\* and GRI guidelines. This verification provides a limited level of assurance as per VeriSustain.

We understand that the reported financial data and related information are based on disclosures from M&M Annual Report for year ending 31st March' 2018, which are subject to a separate independent statutory audit process. We did not review financial disclosures and data in the Sustainability Report and Annual Report 2017-18 as it was not within the scope of our work.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion related to non-financial sustainability disclosures in this Report. We are providing a 'limited level' of assurance and hence no external stakeholders were interviewed as part of this assurance engagement.

# Responsibilities of the Management of M&M Limited and of the Assurance Providers

The Senior Management team of M&M have sole responsibility for the preparation of the Report and responsible for all information provided in the Report as well as the processes for collecting, analysing and reporting the information presented in the Report. M&M has stated in this Report that this report based on the GRI Standards based on its reporting principles and performance indicators for disclosures related to identified material topics from Global Reporting Initiative's Sustainability Reporting Standards.

In performing our assurance work, our responsibility is to the management of M&M; however, our statement represents our independent opinion and is intended to inform outcome of our assurance to the stakeholders of the Company.

DNV GL provides a range of other services to M&M, none of which constitute a conflict of Interest with this assurance work. This is the second year that we are providing assurance of the sustainability disclosures in this Report.

DNV GL's assurance engagements are based on the assumption that the data and information provided by the Company to us as part of our review have been provided in good faith. DNV GL was not involved in the preparation of any statements or data included in the Report except for

this Assurance Statement. DNV GL expressly disclaims any liability or coresponsibility for any decision a person or an entity may make based on this Assurance Statement.

# **Basis of our opinion**

A multi-disciplinary team of sustainability and assurance specialists performed assurance at Corporate office and selected sites of M&M. We undertook the following activities:

- Review of the non-financial sustainability disclosures disclosed in this Report;
- Desk review of performance data submitted for all plants of M&M;
- Review of the processes for gathering and consolidating the performance data and, for a sample, checking the data thru desk review and onsite reviews;
- Review of process of data consolidation at site and corporate level;
- Review of approach to Materiality determination and Stakeholder engagement and recent outputs although we have no direct engagement with stakeholders;
- Review of information provided to us by the Company on its reporting and management processes related to the identified material topics;
- Interviews with selected members of leadership team, and senior managers responsible for management of sustainability issues and review of selected evidence to support issues discussed. We were free to choose interviewees and interviewed those with overall responsibility for the programmes to deliver the targets for medium and long-term Vision, Mission and milestones;
- Site visits were conducted in M&M Corporate Office at Mumbai, Automotive Division sites at Kandivali, Farm Division sites at Kandivali, Swaraj Division -Plant1 at Mohali, Research & Development facility at Chennai to review processes and systems for aggregation of site level sustainability data and implementation of management approach. The sites we visited were selected based on identified material aspects as well as geographical and divisional spread:
- Review of supporting evidence for key claims and data disclosed in the Report.

Our verification processes were prioritised based on our risk based approach i.e. relevance of identified material aspect and sustainability context of the business. The reporting aspect boundary is based on the internal and external materiality assessment covering the operations of companies in India region i.e. the legal entities of the M&M Ltd. - Automotive Division (AD), M&M Ltd. - Farm Division (FD), M&M Ltd.- Swaraj Division (SD), Spares Business Unit (SBU), Mahindra Research Valley (MRV) and Corporate Centre-Mahindra Towers-Worli.

During the assurance process, we did not come across limitations to the scope of the agreed assurance engagement, except that the Report excludes sustainability performance of International operations of Automotive business which were acquired or commenced operations in FY 2017-18 as set out in the Report.

## **Opinion**

On the basis of the verification undertaken, nothing came to our attention to suggest that the Report does not properly describe adherence to the GRI reporting requirements (stated in GRI 102: General Disclosures 2016, GRI 103: Management Approach 2016) including the Principles for Defining Report Content, identified material topics, related Strategies and Disclosures on Management Approach

<sup>&</sup>lt;sup>1</sup> The VeriSustain protocol is available on dnvgl.com. \* Assurance Engagements other than Audits or Reviews of Historical Financial Information.

DNV·GL

and the sustainability performance of identified material topics as below:

- GRI 201: Economic Performance 2016- 201-1;
- GRI 303: Water 2016-303-1, 303-2, 303-3;
- **GRI 305:** Emissions 2016- 305-1, 305-2, 305-3, 305-4;
- **GRI 306:** Effluents and Waste 2016- 306-1, 306-2, 306-3, 306-4, 306-5:
- **GRI 403**: Occupational Health and Safety 2016- 403-1, 403-2, 403-3, 403-4;
- GRI 413: Local Communities 2016-413-1, 413-2;
- GRI 416: Customer Health and Safety- 416-1, 416-2;

#### **Observations**

Without affecting our assurance opinion, we also provide the following observations':

#### Stakeholder Inclusiveness

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

The stakeholder engagement process is fairly established to identify sustainability challenges and concerns of diverse stakeholder groups considering the M&M's operations of Automotive and Farm Equipment sector, however the Report could bring out key stakeholder concerns for key stakeholders as per GRI standards- 102-44 disclosure requirements.

### Materiality

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

M&M has applied the materiality principles of GRI standard to arrive at key material topics for Automotive and Farm Equipment sector of the Company. The materiality determination process was revalidated based on inputs from key stakeholders and senior management of Company. In our opinion Report has not missed out key material issues related to its Automotive and Farm equipment sector operations in India. The management of the Company has established internal assessment process for monitoring and management of identified material aspects on a continual basis for their long term organizational sustainability.

#### Responsiveness

 $The\ extent\ to\ which\ an\ organization\ responds\ to\ stake holder\ issues.$ 

The Report has brought out responses to the identified material aspects and fairly disclosed the strategies and management approach and challenges considering the overall sustainability context of the Automotive and Farm Equipment sector, within the identified aspect boundary. However, the report could bring out the long and medium terms targets related to identified material aspects.

### Reliability

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

The majority of data and information verified at the Corporate Office in Mumbai, and sampled sites in India were found to be identifiable and traceable to the source and nothing came to our attention to suggest that reported data have not been properly collated and consolidated at corporate level, nor that the assumptions used were inappropriate. Some of the data inaccuracies identified during the verification process were found to be attributable to transcription, interpretation and aggregation errors and the errors have been communicated for correction.

#### Completeness

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

The Report has fairly attempted to disclose the sustainability disclosures for key material topics including the disclosure on management approach and identified performance indicators based on GRI standard within the identified reporting boundary i.e. Automotive and Farm equipment sector and excludes other entities such as joint ventures, subsidiaries which are part of its consolidated financial statement as these entities are disclosing their sustainability performance thru a separate report. It is suggested that Report could include sustainability performance of identified material topics related to all entities included in the organizations consolidated financial statement.

#### Neutrality

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

The disclosures related to sustainability issues and performances are reported generally in a neutral tone, in terms of content and presentation, however Report could further bring out responses related to the challenges faced during the reporting period at various geographical locations of operations of M&M.

## **Statement of Our Competence and Independence**

DNV GL applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011- Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the DNV GL Code of Conduct during the assurance engagement and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals.

DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL maintains complete impartiality toward stakeholders interviewed during the assurance process.

For and on behalf of DNV GL Business Assurance India Private Limited

Mithu Ghose

Nitru Gnose
Project Manager
Head Operations- Mumbai
DNV GL - Business Assurance
India Private Limited.

Kishore Kavadia Lead Verifier, Sustainability Services, DNV GL - Business Assurance India Private Limited.

nnavadia

Vindenmar

Vadakepatth Nandkumar
Assurance Reviewer Regional Manager Sustainability & Supply Chain Operations Region India & Middle East,
DNV GL - Business Assurance India Private Limited.

Bengaluru, India, 23rd August, 2018

DNV GL Business Assurance India Private Limited is part of DNV GL - Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. www.dnvql.com

# **■ GRI CONTENT INDEX**



GRI		Disclosure Title	Page	Externally
Standard	Number	Individual disclosure items ('a', 'b', 'c', etc.) are not listed here	Number	Assured

**GRI 101:** Foundation 2016

(GRI 101 does not include any disclosure)

# **GENERAL DISCLOSURES**

GRI	102:	Ger	neral
Disc	losur	۵ و	116

GRI 103: Management Approach 2016

SURES			
102-1	Name of the organization	06	Externally assured
102-2	Activities, brands, products, and services	30-37	Externally assured
102-3	Location of headquarters	05	Externally assured
102-4	Location of operations	06	Externally assured
102-5	Ownership and legal form	06-07	Externally assured
102-6	Markets served	06-07	Externally assured
102-7	Scale of the organization	06-07	Externally assured
102-8	Information on employees and other workers	28-29	Externally assured
102-9	Supply chain	47	Externally assured
102-10	Significant changes to the organization and its supply chain	No significant change	Externally assured
102-11	Precautionary Principle or approach	Carbon emission is a key material issue we have addressed this in Environmnetak (45) and Product performance Chapter (30)	Externally assured
102-12	External initiatives	42,46, 49, 50, 64	Externally assured
102-13	Membership of associations	11	Externally assured
102-14	Statement from senior decision-maker	01-04	Externally assured
102-18	Governance structure	10	Externally assured
102-22	Composition of the highest governance body and its committees	10	Externally assured
102-40	List of stakeholder groups	20	Externally assured
102-41	Collective bargaining agreements	24	Externally assured
102-42	Identifying and selecting stakeholders	20	Externally assured
102-43	Approach to stakeholder engagement	20	Externally assured
102-44	Key topics and concerns raised	20-22	Externally assured
102-45	Entities included in the consolidated financial statements	5	Externally assured
102-46	Defining report content and topic Boundaries	5	Externally assured
102-47	List of material topics	13-14	Externally assured
102-48	Restatements of information	No such Information	Externally assured
102-49	Changes in reporting	No such Changes	Externally assured
102-50	Reporting period	05	Externally assured
102-51	Date of most recent report	Integrated Report FY 2017-18	Externally assured
102-52	Reporting cycle	11th Reporting Cycle	Externally assured
102-53	Contact point for questions regarding the report	05	Externally assured
102-54	Claims of reporting in accordance with the GRI Standards	End Page	Externally assured
102-55	GRI content index	Annexure	Externally assured
102-56	External assurance	Annexure	Externally assured
103-1	Explanation of the material topic and its Boundary	12	Externally assured
103-2	The management approach and its components	12	Externally assured

GRI Standard	Disclosure Number	<b>Disclosure Title</b> Individual disclosure items ('a', 'b', 'c', etc.) are not listed here	Page Number	Externally Assured
Product Stewar	dship			
GRI 103:	103-1	Explanation of the material topic and its boundaries	05	Externally assured
Product Stewardship	103-2	The management approach and its components	12	Externally assured
Management Approach 2016	103-3	Evaluation of the Management Approach	30	Externally assured
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	42	Externally assured
GRI 302:	302-1	Energy consumption within the organization	56-58	Externally assured
Energy 2016	302-4	Reduction of energy consumption	56-58	Externally assured
Water Security				
GRI 103:	103-1	Explanation of the material topic and its boundaries	05	Externally assured
Water Security Management	103-2	The management approach and its components	12	Externally assured
Approach 2016	103-3	Evaluation of the Management Approach	46	Externally assured
GRI 303: Water	303-1	Water withdrawal by source	56-58	Externally assured
and Effluents 2018	303-3	Water recycled and reused	56-58	Externally assured
Carbon Emissio	n			
GRI 103:	103-1	Explanation of the material topic and its boundaries	05	Externally assured
Carbon Emission Management	103-2	The management approach and its components	12	Externally assured
Approach 2016	103-3	Evaluation of the Management Approach	46	Externally assured
GRI 305:	305-1	Direct (Scope 1) GHG emissions	50	Externally assured
Emissions 2016	305-2	Energy indirect (Scope 2) GHG emissions	50	Externally assured
	305-3	Other indirect (Scope 3) GHG emissions	50	Externally assured
	305-4	GHG emissions intensity	50	Externally assured
	305-5	Reduction of GHG emissions	50	Externally assured
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	50	Externally assured
Waste to Wealt	h			
GRI 103:	103-1	Explanation of the material topic and its boundaries	05	Externally assured
Waste to Wealth Management	103-2	The management approach and its components	12	Externally assured
Approach 2016	103-3	Evaluation of the Management Approach	47	Externally assured
GRI 306:	306-1	Water discharge by quality and destination Disclosure	56	Externally assured
Water and Waste	306-2	Waste by type and disposal method	59	Externally assured
	306-3	Significant spills	59	Externally assured
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	59	Externally assured
Sustainable Sup	ply Chain			
GRI 103:	103-1	Explanation of the material topic and its boundaries	05	Externally assured
Sustainable Supply Chain	103-2	The management approach and its components	12	Externally assured
Management Approach 2016	103-3	Evaluation of the Management Approach	46	Externally assured
GRI 308:	308-1	New suppliers that were screened using environmental criteria	47	Externally assured
Supply Chain 2016	308-2	Negative environmental impacts in the supply chain and actions taken	47	Externally assured

GRI Standard	Disclosure Number	Disclosure Title Individual disclosure items ('a', 'b', 'c', etc.) are not listed here	Page Number	Externally Assured
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	29	Externally assured
Health & Safety				'
GRI 103: Health & Safety Management Approach 2016	103-1	Explanation of the material topic and its boundaries	05	Externally assured
	103-2	The management approach and its components	12	Externally assured
	103-3	Evaluation of the Management Approach	23	Externally assured
GRI 403: Occupational Health and Safety 2018	403-2	Types of injury, injury rate (IR), occupational disease rate (ODR), lost day rate (LDR), absentee rate (AR), and work-related fatalities, for all employees	28-29	Externally assured
GRI 405: Diversity and Equal Opportunity 2016	405-1	Percentage of individuals within the organization's governance bodies in each of the following diversity categories:  i. Gender;  ii. Age group: under 30 years old, 30-50 years old, over 50 years old;  iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).	25-29	Externally assured
CSR				
GRI 103: CSR Management Approach 2016	103-1	Explanation of the material topic and its boundaries	05	Externally assured
	103-2	The management approach and its components	12	Externally assured
	103-3	Evaluation of the Management Approach	63	Externally assured
GRI 413: Local Communities 2016	413-1	Percentage of operations with implemented local community engagement, impact assessments, and/or development programs.	63-72	Externally assured
		Operations with local community engagement, impact assessments, and development programs	64-72	Externally assured
GRI 416: Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	35	Externally assured
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	35	Externally assured
	417-2	Incidents of non-compliance concerning product and service information and labeling	37	Externally assured

# Mahindra & Mahindra Ltd.

Gateway Building, Apollo Bunder, Mumbai 400 001, India. Please e-mail your suggestions/views/opinions to sustainability@mahindra.com



This report has been prepared in accordance with the GRI standards: Core Option. It has also been externally assured by DNV GL.