

# Turning Green Goals into Measurable Gains

At TVSM, environmental sustainability is a core pillar of the Company's long-term business strategy and operational philosophy. As a responsible corporate citizen, TVSM is committed to minimising its ecological footprint, conserving natural resources, and accelerating its journey towards a circular and low-carbon economy. Its initiatives focus on sustainable water management, clean energy adoption, waste reduction, and continuous process innovation.

## ENERGY MANAGEMENT AND CLIMATE ACTION

TVSM is firmly committed to achieving Net Zero emissions as a key pillar of its long-term sustainability strategy. Aligned with the commitment to limit global warming to 1.5°C above pre-industrial levels and guided by the ISO IWA 42:2022 Net Zero Guidelines, the Company has developed a scientific decarbonisation roadmap that reflects international best practices. Its approach is rooted in environmental responsibility and designed to address both direct (Scope 1) and indirect (Scope 2 and 3) emissions in a comprehensive manner.

The Company undertook an extensive Scope 3 emissions assessment last year, covering 11 out of 15 applicable categories in FY 2023-24, using a methodology combining spend-based, distance-based, and average data models. This detailed mapping ensures a precise understanding of the Company's emissions footprint and reinforces its commitment to transparency and data-driven climate action.

But emissions is only one part of the TVSM's decarbonisation roadmap. Complementing its emissions reduction efforts, is the steady transition to 100% renewable energy across all operations. The Company's energy transition strategy focuses on increasing the share of wind and green power, further supported by energy efficiency projects at the plant-level.



# 95.32%

of TVSM's total energy mix is derived from renewable energy sources (as of 31<sup>st</sup> March, 2025)



## Progress in FY 2024-25

TVSM has taken a proactive approach to decarbonisation by increasing reliance on renewable energy and improving energy efficiency across its manufacturing footprint.

- As of 31<sup>st</sup> March 2025, 95.32% of TVSM's total energy mix was derived from renewable sources, including wind power and green energy procured through the Indian Energy Exchange
- TVSM Hosur, Nalagarh and Norton Motorcycles UK were certified under ISO 50001:2018 for their robust energy management systems
- The Company continues to drive energy efficiency through targeted projects:
  - **Compressor Heat Recovery:** By reusing heat generated from compressors in the powder coating process, TVSM saved 2.4 lakh kWh and 54,000 kg of fuel annually; the initiative led to improved overall thermal efficiency while significantly reducing GHG emissions.
  - **Conversion to EC Fans:** Replacing traditional blowers with Electronically Commutated (EC) fans in the paint shop yielded 1,000 kWh savings annually; the upgrade now ensures better airflow control and reduced maintenance requirements.
  - **Compressor Optimisation:** Dynamic load-based adjustments in compressor operations led to energy savings of 31,000 kWh per year; the optimisation has enhanced operational efficiency and lowered electrical costs and mechanical wear.
  - **Sensor-Based Lighting:** Installation of occupancy sensors in R&D offices resulted in an annual power saving of over 1.1 million kWh, enhancing workplace sustainability without compromising on functionality.

## SUSTAINABLE WATER MANAGEMENT

Responsible water management is an essential part of TVSM's sustainability strategy. Given the mobility sector's high dependence on water for processes like metal fabrication, painting, and cooling, the Company adopts a proactive approach to mitigate water-related risks such as scarcity, regulatory pressures, and climate variability.

TVSM conducts detailed water assessments, including water leak audits and mass balance analyses, to identify inefficiencies and conserve water across its operations. The Company has established internal region-specific targets, overseen by the senior management, and integrates water stewardship as a material issue within its broader climate risk evaluations under the Task Force on Climate Related Financial Disclosures (TCFD) framework.

The Company ensures that its plants operate within a Zero Liquid Discharge (ZLD) framework, thereby eliminating the release of wastewater beyond plant boundaries. Its Hosur plant is a ZLD facility, exemplifying TVSM's leadership in industrial wastewater treatment. International operations follow stringent local norms, ensuring compliant wastewater treatment and discharge.

TVSM's water stewardship approach extends across its value chain, including critical suppliers and dealers, with a long-term goal of becoming water positive in all regions of operation. The Company implements basin-specific interventions to replenish water sources and reduce water intensity, supported by practices like rainwater harvesting and recycling treated water for non-potable uses such as cooling, irrigation, and Water, Sanitation, and Hygiene (WaSH).

To further embed accountability, TVSM has introduced an Internal Water Pricing (IWP) mechanism — valued at approximately ₹100.1 per kilolitre — which factors in direct and indirect water costs. This initiative incentivises efficient water use and guides investment decisions across the Company.

# 40-50%

Reduction in usage of raw water achieved through the deployment of advanced water technologies in FY 2024-25

### Progress in FY 2024-25



- Deployed advanced water-saving technologies such as optimised process equipment and membrane filtration systems, achieving a 20%–50% reduction in raw water consumption



- Rainwater harvesting, reuse of treated water, and sewage treatment upgrades have enabled TVSM to secure Water Positive certification at all its manufacturing sites:
  - Hosur, Tamil Nadu  
**Water Positive Ratio: 1.21**
  - Mysuru, Karnataka  
**Water Positive Ratio: 1.24**
  - Nalagarh, Himachal Pradesh  
**Water Positive Ratio: 1.49**

These integrated efforts help TVSM conserve freshwater, reduce operational costs, and enhance water resilience across its operations.





## ZERO WASTE TO LANDFILL & RESOURCE CIRCULARITY

TVSM is actively transitioning from a linear to a circular economy as part of its climate resilience strategy. With a strong focus on minimising environmental impact, the Company integrates waste reduction, resource efficiency and regulatory compliance into its manufacturing processes.

A key outcome of this commitment is a specific waste intensity of 17.21 kg per vehicle sold and Zero Waste to Landfill certification at its Hosur facility, with a 99.76% diversion rate. Advanced recycling technologies and the use of recycled materials reduce reliance on virgin resources, conserve energy, and lower emissions.

TVSM's internal frameworks, including TSMS 9765 (TVS Standard Material Specification 9765) and GRMS (Global Regulatory Monitoring System), ensure compliance with international regulations and support the phase-out of hazardous substances. The Company continues to monitor and prepare for evolving global norms.

Beyond its operations, TVSM fosters sustainability through the Waste Management Ambassador Programme and Supplier Excellence initiatives, promoting awareness and responsible practices across its value chain. With 84% of materials sourced locally, TVSM enhances supply chain resilience while supporting national self-reliance goals.

### Progress in FY 2024-25

The Company aims to make all its operations Zero Waste to Landfill (ZWL) and has taken significant steps towards this goal:



- In FY 2024-25, three manufacturing facilities in India were certified as Zero Waste to Landfill by the Confederation of Indian Industry (CII)
- Hazardous waste is co-processed or sent to authorised recyclers, ensuring safe disposal and resource recovery
- 100% of non-hazardous waste is recycled, and food waste is composted and used as manure, advancing zero-waste-to-landfill and circular economy goals
- Investments in bio-sludge dewatering, fine screening, and sustainable chemical substitution have strengthened TVSM's ability to repurpose waste while reducing environmental risks

TVSM continues to phase out hazardous substances through process redesign, material substitution, and closed-loop systems that emphasise eco-friendly alternatives and safe disposal.

# 3

Manufacturing facilities certified as Zero Waste to Landfill (ZWL) in FY 2024-25 by CII

## BIODIVERSITY COMMITMENT

TVSM integrates biodiversity conservation into its climate resilience and sustainability strategy, recognising the critical link between healthy ecosystems and long-term business viability. Guided by a robust Biodiversity Impact and Risk Assessment (BIA) framework, the Company evaluates and mitigates potential environmental impacts across its operations and value chain.

Though its facilities are located in designated industrial areas, TVSM proactively applies a mitigation hierarchy, ensuring its actions support local biodiversity and avoid ecological harm. It has committed to achieving a net positive impact on biodiversity by 2040, with no net loss of natural ecosystems. The Company is also aligned to global frameworks such as the Kunming-Montreal Protocol and Indian Business and Biodiversity Initiative (IBBI).

TVSM uses both qualitative and quantitative tools, including BIA's GaBi Life Cycle Analysis (LCA) modelling, to identify material biodiversity hotspots and formulate targeted mitigation strategies. It also plans to measure the carbon sequestration potential of its afforestation efforts, further linking biodiversity gains with climate action.

Biodiversity is treated as a shared responsibility, with efforts extending to suppliers, communities, and employees. Through conservation partnerships, training, and environmental education, TVSM fosters a culture of stewardship, reinforcing its commitment to nature-positive growth and the UN Sustainable Development Goals.

# 43%

of TVSM plants in India are now covered by human-grown forests, supporting approximately 1,000 species of plant and animal life

### Progress in FY 2024-25









- Recognition as a Conservation Site:** The Hosur facility has been identified as a potential OECM (Other Effective Area-based Conservation Measure) by the United Nations Development Programme (UNDP) and the Biodiversity Authority of India, acknowledging its contribution to biodiversity preservation outside protected areas
- Extensive Green Cover:** 42% of land across TVSM's three Indian sites are now covered by human-grown forests, fostering a thriving ecosystem that supports over 900 species of flora and fauna
- Commitment to Nature-positive Growth:** In alignment with global biodiversity goals, TVS Motor reaffirmed its dedication to coexisting with nature and promoting a sustainable future, marking its progress on the International Day for Biological Diversity





## SUSTAINABILITY IN ACTION

### Key Initiatives and Impact

INITIATIVE	SUMMARY	OUTCOME
 <b>Heat Recovery</b>	Reused compressor waste heat for powder coating at Hosur	Saved 2.4 lakh units/year electricity and 54,000 kg/year fuel
 <b>Reusable Hydration Solutions</b>	Replaced single-use plastic with reusable bottles	Eliminated plastic waste; distributed 750 bottles/day
 <b>Sewage Treatment Upgrade</b>	Installed 400 KLD STP at Mysuru	Improved water reuse quality and reduced cost
 <b>Screw Press Dewatering</b>	Bio-sludge dewatering system installation	Reduced sludge volume and enabled composting
 <b>EC Fans in Paint Shop</b>	Replaced conventional blowers with energy-efficient fans	Saved 1,000 kWh/year
 <b>Compressor Optimisation</b>	Dynamic load-based pressure adjustments	Saved 31,000 kWh/year
 <b>Heat Pump Integration</b>	Heat pump for pretreatment at Hosur	Saved 410 kg/year of propane
 <b>Occupancy Sensors</b>	Installed in R&D offices	Reduced power use by over 1.1 million kWh/year

TVSM remains steadfast in its mission to drive positive environmental outcomes through innovation, collaboration, and accountability. As it scales its sustainability efforts, the Company will continue to align with global best practices and the United Nations Sustainable Development Goals (SDGs) ensuring that environmental stewardship remains integral to its growth journey.