Magma Magma Green TerraMag

ESG IMPACT REPORT · FY 2025–26

Magma Group ESG Impact Report

How Magma is quietly making India's factories more efficient and more circular — one tonne at a time.

MATERIAL RECHANNELLED · APR–MAR

48,754 MT

CO_2E AVOIDED · PER ₹1 CR REVENUE

276 MT

IMPORTS SUBSTITUTED

₹123.7 Cr

WATER CONSERVED · PER ₹1 CR REVENUE

21,628 M^3

01 — SETTING THE STAGE

India generates **62 million tonnes** of reusable industrial material every year. Most of it is treated as a cost, not an asset.

Every year, India's manufacturing belt generates enormous volumes of paper rejects — kraft, OCC, white ledger, duplex board — and plastic rejects — PP, LLDPE, HDPE, PET, and more — most of which are landfilled, burned, abandoned, or find their way into waterways and the ocean. Those same factories run their boilers on coal, while rice husk, bagasse, and mustard stalks from India's farms go unused as fuel. The waste and the solution are separated by nothing more than the right supply chain.

Across India's factories, **40–50% of machine capacity sits idle** — and that idleness has a cost far beyond lost output.

An idle machine is not a neutral machine. It still consumes power, still demands maintenance, and still generates carbon — for zero output. Across India's processing units, bailers, and machine shops, 40–50% of installed capacity sits unused at any given time. That is not just a commercial inefficiency — it is an environmental one.

India's factories lose **2–5% of every batch** to yield loss — material that was processed, but never became product.

When raw materials are inconsistent or overspecified, factories absorb yield loss silently — energy consumed, water used, and carbon emitted for finished product that never existed. The right material, specified to the right batch, changes the output without changing the process.

Magma is a **Factory Enabler** — an integrated industrial operations platform that addresses these problems across the full production lifecycle.

01 / PRE-PRODUCTION

ADVANCED MATERIALS

Advanced Materials

Batch-specific, quality-assured performance materials that reduce rejection rates and improve yield — directly measured in this report's yield improvement metric.

02 / PRODUCTION

MAGMA ENGINEERING

Magma Engineering

Higher machine utilisation through reliable throughput and localised engineering components — the backbone of this report's plant utilisation carbon metric.

03 / POST-PRODUCTION

MAGMA GREEN

Magma Green

Structured circular recovery — turning paper, plastic, and biomass into feedstock that displaces virgin imports and eliminates carbon at the source.

This report measures the ESG-related impact of that system — not as an aspiration, but as a set of verified outcomes from FY2025–26 operations. The full scope of Magma's impact extends well beyond what is reported here.

Two chains. **One circular system.**

Magma's impact runs across two connected chains — a circular material chain where every tonne triggers a cascade of environmental savings, and an operational chain where every factory becomes more efficient and less carbon-intensive. Behind both chains, 1,423 people earning a livelihood.

CHAIN 1 — THE CIRCULAR MATERIAL LOOP

48,754 MT

Industrial material enters the network instead of a landfill — or worse

Paper and plastic rejects are diverted from disposal and rechannelled into productive industrial use. Without a structured collection system, this material finds its way to open dumps, waterways, and ultimately the ocean. India is among the world's largest contributors to ocean-bound plastic pollution. Every tonne Magma captures is a tonne that never makes that journey.

67,934 MT CO_2e

Virgin production is displaced — and its carbon never enters the atmosphere

Because Magma's recycled material replaces what would otherwise have been virgin paper or plastic, the emissions that virgin production would have generated simply do not occur. This is the largest single environmental impact in the chain.

5,493,520 M^3

Water that was never drawn from the ground

Virgin paper: 40,000 L/MT. Recycled: 24,000. Virgin plastic: 180,000 L/MT. Recycled: 2,200. At 48,754 MT proce ssed, nearly 5.5 billion litres stayed in the ground, the river, or the reservoir.

1,833,776GJ

Energy that was never consumed

Recycled paper requires half the energy of virgin paper. Recycled plastic requires less than a third. Across 43,229 MT processed, 1.83 million GJ were never drawn from the grid — equivalent to the annual electricity consumption of approximately 170,000 Indian households.

13,478 MT CO_2e

Coal is replaced—before it is ever burned

Agricultural biomass — rice husk, bagasse, mustard stalks — supplied as a direct coal substitute, eliminating the emissions and water consumption of coal combustion before a single tonne is fired.

₹123.7 Cr

And the money that stayed in India

₹123.7 Cr of foreign exchange stayed inside the Indian economy this year. For every ₹1 Magma earns, ₹0.49 of import demand is eliminated. The circular economy is not just an environmental strategy. It is an industrial sovereignty strategy.

CHAIN 2 — THE OPERATIONAL EFFICIENCY LOOP

343 MT CO_2e

Logistics that move material do double duty

Every outbound delivery becomes an inbound collection on the return journey. 25% of all 3,663 trips were optimised this way — saving 228,938 km of otherwise empty running.

1,860 MT CO_2e

Under-utilized capacity is activated — cleanly

By routing material through partner facilities running below capacity, Magma fills idle throughput and eliminates the energy consumed for zero productive output. Across 350 facilities, a 20% utilisation increase saves 1,860 MT CO_2e per year.

2,634 MT

Better materials mean less waste at the customer's end

Magma's customised formulations are engineered to spec rather than overspecified. System-wide yield improvement from 90% to 95%. 2,634 MT of material that would have been rejected is now finished product.

> And behind every link in both chains, a person earning a livelihood. 38 Magma and TerraMag employees. 852 supply facility employees. 500 customer factory employees. 33 logistics crew on the road every day. **1,423 people** with a stake in whether this system works.

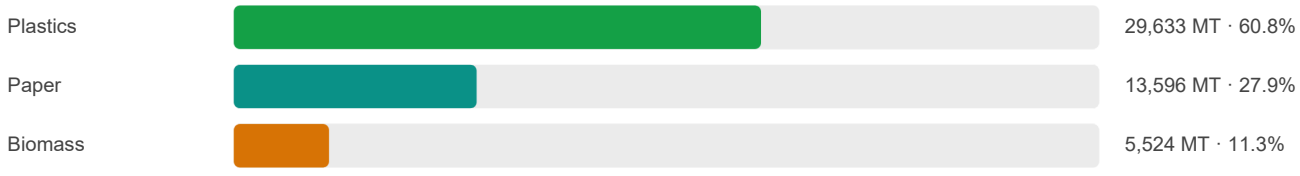
03 — ENVIRONMENTAL PERFORMANCE

From **48,754 tonnes** of recovered material to 70,138 tonnes of carbon avoided.

The environmental case for Magma rests on a single, verifiable principle: recycled materials carry a fraction of the carbon and water footprint of their virgin equivalents. At scale, that fraction becomes a number large enough to matter.

Material rechannelled — 48,754 MT

BREAKDOWN BY MATERIAL CATEGORY



OCEAN-BOUND & LANDFILL DIVERSION

India ranks among the world's largest contributors to mismanaged plastic and paper waste. Without a structured industrial collection system, the paper and plastic Magma processes would largely end up in open dumps, drains, and waterways — on a path to the ocean. The 43,229 MT of plastic and paper processed this year represents material that never reached that endpoint.

Carbon avoided — 70,138 MT CO_2e total

Plastic is the dominant contributor — the emissions gap between virgin and recycled plastic (1.70 MT CO2e/MT) is far wider than for paper (0.30 MT CO2e/MT). Biomass replacing coal avoids 2.44 MT CO2e per tonne substituted.

TOTAL CARBON AVOIDED — FY2025–26

CIRCULAR SUBSTITUTION	PLANT UTILISATION	REVERSE LOGISTICS
67,934	1,860	343
MT CO_2e · 96.9%	MT CO_2e · 2.7%	MT CO_2e · 0.5%

GRAND TOTAL

70,138 MT CO_2e avoided

Equivalent to removing ~15,200 petrol cars from Indian roads for a full year

Water conserved — 5,493,520 M³

Nearly 5.5 billion litres of freshwater that stayed in the ground, the river, or the reservoir — enough to meet the annual drinking water needs of approximately 15,000 Indian households.

Energy saved — 1,833,776 GJ

Producing virgin material is energy-intensive. Virgin paper requires 30 GJ/MT — recycled paper needs 15 GJ. Virgin plastic demands 75 GJ/MT — recycled plastic just 20 GJ. Across 43,229 MT processed, 1.83 million GJ were never consumed.

PAPER RECYCLING

203,946 GJ

15 GJ/MTsaved ×13,596MT

11% of total energy saved

PLASTIC RECYCLING

1,629,830 GJ

55 GJ/MT saved × 29,633 MT

89% of total energy saved

Yield improvement — 2,634 MT saved

A 5 percentage point yield improvement (90% → 95%) across the Advanced Materials and Magma Green value chain means 2,634 MT of material that would have been rejected is now finished product.

04 — ECONOMIC IMPACT

₹123.7 Cr of imports that **never left India.**

Every tonne of recycled material Magma supplies is a tonne India did not need to import. Magma's circular supply chain keeps foreign exchange inside the Indian economy and directly supports the Atmanirbhar Bharat agenda.

The substitution value is calculated by applying India's actual import dependency ratio for each material category to Magma's processed volumes and current import prices.

PLASTICS · 42% IMPORT DEPENDENCY

₹109.5 Cr

29,633MT× ₹88,000 × 42%

89% of total import saving

PAPER · 12% IMPORT DEPENDENCY

₹12.6 Cr

13,596 MT × ₹77,000 × 12%

10% of total

BIOMASS VS COAL · 28%

₹1.6 Cr

5,524 MT × ₹10,200× 28%

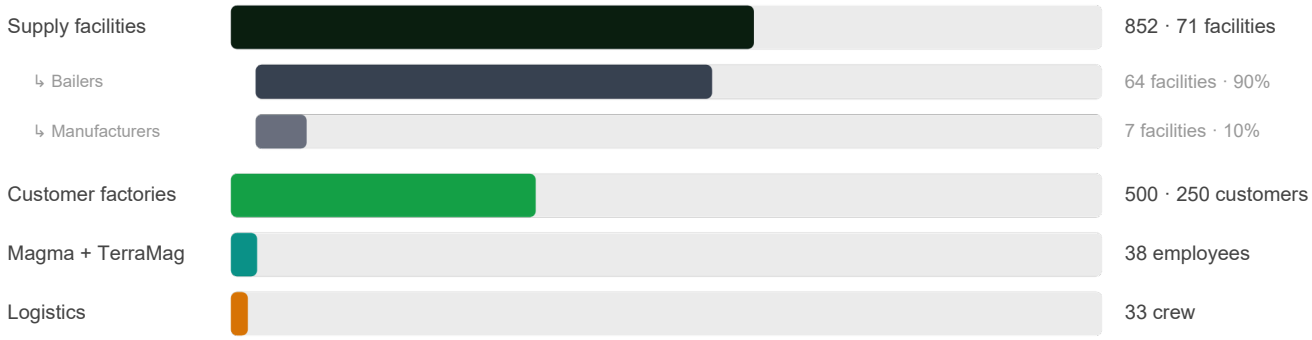
1% of total

For every ₹1 of revenue Magma earns, ₹0.52 of import demand is eliminated from India's trade balance. Plastic dominates — India remains deeply import-dependent on virgin polymer raw materials.

The circular economy only works **if people are at the centre of it.**

Magma is not a technology platform that automates away human labour. It is a supply chain that requires — and creates — human participation at every node. Each person is someone with an income, a skill, and a stake in whether the system works. This year, 1,423 people earned livelihoods directly connected to Magma's circular supply chain.

1,423 LIVELIHOODS — BREAKDOWN BY CATEGORY



The 852 supply facility workers deserve particular attention. Of the 71 supply facilities in Magma's network, 90% are bailers — the unsung infrastructure of India's recycling economy — and 10% are manufacturers. By becoming a reliable off-take partner, Magma has stabilised these facilities' economics and the livelihoods of the 852 people who work in them.

> *Every supply facility Magma activates is not just a processing node. It is a local employer, a local taxpayer, and a local stakeholder in the circular economy. The 852 people working in those facilities are the most tangible proof that industrial sustainability and economic inclusion are not competing goals.*
>
> MAGMA SOCIAL IMPACT FRAMEWORK, FY2025–26

MSME enablement — 2.34% of western India's manufacturing base

Of 13,700 MSME factories in western India matching the Magma archetype, 321 are currently active in Magma's network — 71 on the supply side and 250 on the customer side.

13,700	71	250	2.34%
TOTAL ARCHETYPE MSMES IN WESTERN INDIA	SUPPLY-SIDE MSMES ENABLED	CUSTOMER-SIDE MSMES ENABLED	OF WESTERN INDIA'S MSME BASE ENABLED

06 — IMPACT EFFICIENCY

For every rupee Magma earns, **the environment gets something back.**

Revenue is the conventional measure of a company's scale. For Magma, it is also a lens on impact intensity — how much environmental, economic, and social value is generated per unit of economic activity.

PER ₹1 CR OF REVENUE

192 MT

of secondary material rechannelled

PER ₹1 CR OF REVENUE

276 MT

of CO_2e permanently avoided

PER ₹1 CR OF REVENUE

21,628 M³

PER ₹1 CR OF REVENUE

7,220 GJ

PER ₹1 CR OF REVENUE

₹0.49 Cr

of import demand eliminated

PER ₹1 CR OF REVENUE

5.60

livelihoods supported

For every crore Magma earns, India's industrial system avoids 276 MT of CO_2, conserves 21,628 M³ of water, saves 7,220 GJ of energy, supports 5.60 livelihoods, and eliminates ₹0.49 Cr of import demand.

MAGMA IMPACT EFFICIENCY ANALYSIS, FY2025–26

07 — GLOBAL ALIGNMENT

A local supply chain with **global consequence.**

Magma's impact is rooted in Gujarat's industrial belt — but its metrics map directly onto the global sustainability agenda.

SDG	MAGMA'S CONTRIBUTION	METRIC
SDG 1 — No Poverty	Formal income generation for informal waste sector workers	S1
SDG 6 — Clean Water	5.49 billion litres of freshwater conserved	E7
SDG 8 — Decent Work	1,423 livelihoods · 2.34% of western India's MSME base enabled	S1, S2
SDG 9 — Industry & Innovation	350 partner facilities at full utilization · yield uplift for customers	E4, E6
SDG 12 — Responsible Consumption	48,754 MT rechannelled · customised formulations reduce virgin demand	E1, E5
SDG 13 — Climate Action	70,138 MT CO_2e avoided across three carbon pathways	E2, E3, E4
SDG 17 — Partnerships	250+ customers, 71 supply facilities	All