



BRSR Core 2026: How Indian Manufacturers Build Audit-Ready Scope 1, 2 and 3 Data

By Sudarshan Karweer · 27 August 2026 · growthifye.com

A practical 2026 guide to BRSR Core-aligned carbon data systems, Scope 1-2-3 accounting, MRV and decarbonisation planning for Indian industry.

Indian industry has moved past the stage where carbon reporting is a CSR side note. In 2026, carbon data is becoming an operating variable that affects export competitiveness, cost of capital, customer qualification, board oversight and project prioritisation. For listed companies, value-chain suppliers and emissions-intensive sectors, the immediate challenge is no longer whether to disclose, but how to build a data system that stands up to BRSR Core scrutiny, investor questions and future carbon-market participation.

For many companies, the first pain point appears deceptively simple: Scope 1 and Scope 2 numbers do not reconcile cleanly across finance, operations and sustainability teams. The second is harder: Scope 3 data is fragmented across procurement, logistics, contract manufacturing and downstream distribution. The third is strategic: once emissions are measured, management needs a credible way to convert data into an investable reduction plan.

This article sets out a practical 2026 playbook for Indian manufacturers and large commercial and industrial energy users to build audit-ready greenhouse-gas data, align with BRSR Core expectations, and create a decision framework for decarbonisation. The focus is on what works on the ground: meter boundaries, fuel conversion factors, supplier data quality, assurance readiness, internal controls and the link between emissions baselining and capex allocation.

Why BRSR Core has changed the carbon conversation in India

BRSR started as a disclosure exercise for the top listed universe, but BRSR Core has sharpened the conversation by pushing companies toward measurable, assured ESG data points with greater comparability. In practice, this means sustainability teams can no longer rely on spreadsheet-led, year-end estimations without a clear audit trail. Carbon-related metrics are increasingly being examined alongside energy intensity, water intensity, waste handling, safety and supply-chain performance.

For Indian corporates in steel, cement, chemicals, textiles, auto components, food processing, data centres, pharmaceuticals and engineering goods, this matters for five reasons:

- Customers, especially multinational buyers, increasingly ask for facility-level or product-level emissions evidence
- Lenders and investment committees want traceable environmental data, not just ambition statements
- Exporters face a more carbon-sensitive trade environment, particularly in sectors with EU market exposure
- Boards want clarity on which decarbonisation projects reduce both emissions and operating cost
- Emerging carbon-market and compliance frameworks require stronger measurement, reporting and verification discipline

A plant that reports annual diesel consumption based on finance invoices, grid electricity based on utility bills and process fuel based on procurement records may produce a usable estimate. But that approach often



fails when asked to explain monthly variances, production-normalised intensity, line-level abatement opportunities or third-party assurance exceptions.

Start with a boundary map, not a calculator

The most common mistake in corporate carbon accounting is rushing into emission calculations before fixing organisational and operational boundaries. In 2026, a robust Indian industrial inventory should begin with a boundary map covering legal entities, plants, warehouses, captive generation assets, leased assets and major outsourced processes.

At minimum, management should document:

- Which entities are included under operational control or financial control
- Which sites are active in the reporting year and from what date
- Which combustion sources exist: boilers, furnaces, dryers, DG sets, kilns, thermic fluid heaters, process burners
- Which fugitive sources matter: refrigerants, fire suppressants, SF6 or process gases where applicable
- Which purchased-energy flows exist: grid electricity, third-party steam, chilled water, open-access power, rooftop solar, captive solar, captive wind, banking and wheeling arrangements
- Which value-chain categories are material enough to estimate in Scope 3

This sounds administrative, but it determines whether your final inventory is defensible. A common Indian example is a company using a mix of DISCOM supply, group-captive solar, short-term open-access power and diesel backup across different states. Unless each flow is mapped by facility and by contract structure, Scope 2 calculations become inconsistent, especially when management wants both location-based and market-instrument-aligned reporting views.

The same issue shows up in manufacturing groups with job-work arrangements. If a major outsourced processor is operationally critical, emissions may sit in Scope 3 for reporting purposes, but commercial decisions on reduction will still depend on collecting primary data from that vendor.

Scope 1 and Scope 2: get the activity data right before debating factors

Most reporting arguments wrongly focus on emission factors. In reality, the largest errors usually come from poor activity data capture. A better sequence is: source list, meter list, unit harmonisation, monthly reconciliation, then factors.

For Scope 1, Indian companies should classify direct emissions into three buckets:

- Stationary combustion: natural gas, furnace oil, LDO, HSD, LPG, biomass, petcoke, coal, producer gas and similar fuels
- Mobile combustion: owned or controlled vehicles, forklifts, internal logistics fleets
- Process and fugitive emissions: clinker process emissions, lime calcination, refrigerant leakage, specialty gases and sector-specific process streams

Good practice in 2026 includes monthly fuel logs tied to weighbridge slips, tank dip readings, gas meter records and invoice reconciliation. Where fuels are blended or moisture-sensitive, standard calorific assumptions should be documented centrally. If a plant uses biomass, teams should not stop at “biomass is carbon neutral.” They need to quantify quantity, type, moisture assumptions, transport-related Scope 3 impacts and particulate or local-air implications for technology decisions.



For Scope 2, the Indian context requires special attention because power sourcing is now structurally more complex. Large C&I consumers often use a portfolio approach combining DISCOM power, exchange purchases, third-party open access, group captive supply and behind-the-meter renewables. That creates both opportunity and accounting complexity.

In tariff terms, many energy-intensive consumers in 2026 still face effective industrial grid tariffs in the range of roughly Rs 6.5-9.5/kWh depending on state, voltage level, demand charges and duty structure. By contrast, delivered open-access solar or hybrid tariffs in favourable states may land around Rs 4.0-5.5/kWh before site-specific balancing, scheduling, banking and curtailment impacts. For companies with high daytime loads and strong contracting discipline, RE-led Scope 2 reduction can therefore cut both emissions and power cost. But to claim and manage the reduction properly, data systems must separate:

- Physical units consumed by source
- Contracted renewable volumes
- Banking and settlement treatment
- Captive versus third-party attributes
- Backup power use during outages and curtailment periods

This is where firms often need more than reporting support; they need integrated [Carbon accounting & disclosure]([/coreservices/netzerodecarbonisation/carbonaccountinganddisclosure]) linked with procurement and energy management systems.

Scope 3 in India: prioritise material categories and supplier evidence

Scope 3 is where most net-zero strategies lose momentum. Not because it is impossible, but because companies try to calculate all 15 categories with equal depth from day one. A more effective route is materiality-led prioritisation.

For Indian manufacturing and large C&I users, the categories that most often dominate are:

- Purchased goods and services
- Fuel- and energy-related activities not included in Scope 1 or 2
- Upstream transportation and distribution
- Waste generated in operations
- Business travel and employee commuting in some sectors
- Downstream processing or use-phase emissions for selected products

A textile exporter may find purchased yarn, chemicals, packaging and logistics dominating Scope 3. An auto-component company may see metals, bought-out parts and outsourced machining as major contributors. A food processor may find agricultural sourcing and cold-chain logistics to be material. A data centre operator may have significant embodied emissions in equipment and backup systems.

The practical question is not whether supplier-specific data exists for everyone. It rarely does. The real question is how to build a tiered evidence model:

- Tier 1: supplier-specific primary data with documented methodology
- Tier 2: product- or industry-average secondary data adjusted for geography or process where feasible
- Tier 3: spend-based proxies for low-materiality categories, used transparently and phased down over time



By 2026, larger Indian corporates should be pushing top suppliers to disclose energy use, fuel mix, production volumes and basic emissions factors, at least for high-value categories. Procurement teams should add carbon-data clauses into RFQs and annual rate contracts, especially where exporters face customer questionnaires or CBAM-related value-chain scrutiny.

A simple but effective operating model is to classify suppliers into A, B and C bands based on spend and emissions relevance, then request primary activity data only from A suppliers in year one. This sharply improves data quality without overwhelming vendor ecosystems.

Build MRV like a control system, not a presentation exercise

If carbon data will be assured, traded, linked to customer disclosures or used for target setting, MRV cannot sit only in PowerPoint. It needs internal controls similar to quality, finance or EHS systems.

A plant-level MRV system should define:

- Data owner for each emission source
- Data source hierarchy: meter, invoice, ERP entry, manual log, estimate
- Monthly closing calendar
- Variance threshold for investigation, such as plus or minus 5-10%
- Approval workflow before consolidation
- Version control and change log for factors and assumptions
- Evidence retention period and file naming convention

For companies with multiple sites, a central emissions protocol is essential. Otherwise one unit reports LPG in kilograms, another in cylinders, a third in tonnes, and a fourth estimates from vendor bills. The inventory may still total correctly after conversion, but assurance findings will multiply because the process is not standardised.

Indian firms preparing for external assurance should pressure-test their inventory on six questions:

- Can every material number be traced back to a source document?
- Are conversions and assumptions documented and consistently applied?
- Are missing months estimated using a defined protocol?
- Are organisational boundaries consistent with the annual report and statutory structure?
- Are renewable electricity claims aligned with actual contractual arrangements?
- Can prior-year restatements be explained clearly?

This discipline also prepares companies for future participation in [Carbon markets & MRV](/coreservices/netzerodecarbonisation/carbonmarketsandmrv) frameworks, whether voluntary, domestic or trade-linked.

From inventory to action: use MACC logic, not generic net-zero claims

Once the baseline is built, companies need a way to rank interventions. This is where a marginal abatement cost curve, or MACC, remains one of the most useful tools for Indian industry. The objective is straightforward: identify which actions reduce emissions fastest, cheapest and most reliably under current operating conditions.

In 2026, a practical MACC for an Indian plant should compare at least the following options:



- Process optimisation and controls tuning
- Compressed air leak reduction and motor system upgrades
- Waste heat recovery where thermal profiles support it
- Boiler efficiency improvement and fuel switch options
- Electrification of low- and medium-temperature heat where feasible
- Rooftop solar, open-access solar, wind-solar hybrid and storage-backed procurement
- Replacement of diesel-based backup with cleaner alternatives and better reliability planning
- Refrigerant management and replacement
- Product redesign or material substitution where commercially viable
- Green hydrogen pilots only for genuinely hard-to-abate thermal or feedstock applications

Not every measure needs complex modelling. Some are obvious no-regret steps. For instance, industrial efficiency and motor-system interventions often deliver sub-three-year payback. Open-access renewable procurement can reduce Scope 2 emissions materially while lowering effective power cost in the right state-policy context. Low-temperature process heat electrification may become attractive where equipment replacement cycles align with cheap renewable power and where thermal duty is controllable.

By contrast, green hydrogen should be assessed carefully. In India, delivered renewable hydrogen costs have improved versus early pilots, but for most applications in 2026 they still require targeted use cases, infrastructure planning and strong economics relative to incumbent fuels. It fits best where direct electrification is difficult, process purity matters or future offtake premiums are credible.

The point is that a target without a ranked project list is not a strategy. Growthifye's work in [Net-zero roadmaps & MACC](/coreservices/netzerodecarbonisation/netzeroroadmapsandmac) is most valuable when linked to actual utility bills, process constraints, tariff structures and financing pathways.

2026 board priorities: what leadership should ask now

For CEOs, CFOs, sustainability heads and plant leaders, the next 12 months are less about announcing another distant year target and more about answering operational questions with confidence.

Leadership teams should ask:

- Which 20 emission sources account for 80% of our footprint?
- How much of our Scope 2 can be reduced through renewable procurement in the next contract cycle?
- Which top 25 suppliers need primary data requests this year?
- Where do we have assurance risk because of weak controls or missing evidence?
- Which decarbonisation projects are NPV-positive at current tariffs and fuel prices?
- Where do policy shifts such as state open-access rules, RPO trajectories, the India Carbon Credit Trading Scheme architecture and export carbon requirements affect us most?

The strongest companies in 2026 are not necessarily those with the lowest current emissions. They are the ones building systems that convert data into repeatable decisions: cleaner power procurement, smarter capex sequencing, supplier engagement, customer disclosure readiness and credible target pathways.

For Indian C&I consumers, developers, lenders and policymakers, this is the practical bridge between disclosure and decarbonisation. Audit-ready carbon data is no longer the end product. It is the operating foundation for competitiveness.



If your organisation needs a plant-up decarbonisation baseline, BRSR Core-ready emissions architecture or a board-level action plan covering Scope 1, 2 and 3, contact Growthifye's advisory desk to discuss a tailored roadmap.

Explore Growthifye's related capabilities

This analysis connects directly to our advisory practice: [\[Carbon accounting & disclosure\]\(/coreservices/netzerodecarbonisation/carbonaccountinganddisclosure\)](#) · [\[Net-zero roadmaps & MACC\]\(/coreservices/netzerodecarbonisation/netzeroroadmapsandmacc\)](#) · [\[RE-led decarbonisation\]\(/coreservices/netzerodecarbonisation/releddecarbonisation\)](#) · [\[Industrial efficiency & electrification\]\(/coreservices/netzerodecarbonisation/industrialefficiencyandelectrification\)](#).

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