



India 2026 SBTi Roadmaps for Industry: Baselines, MACC and Finance-Ready Decarbonisation

By Sudarshan Karweer · 12 September 2026 · growthifye.com

How Indian companies can build 2026 SBTi-aligned decarbonisation roadmaps using baselines, MACC, capex sequencing and audit-ready MRV.

Indian industry has spent the last two years building emissions inventories, answering customer questionnaires, and preparing for BRSR Core, CBAM, CCTS and tighter lender scrutiny. In 2026, the conversation has moved one level deeper: not whether to decarbonise, but how to convert carbon ambition into a target architecture, plant-level abatement pipeline and financeable implementation sequence.

For many Indian companies, that means moving toward a Science Based Targets initiative, or SBTi, aligned roadmap. This is especially relevant for listed manufacturers, large energy consumers, export-oriented sectors, infrastructure platforms, diversified groups and private firms seeking lower-cost capital tied to sustainability performance. It is also increasingly relevant for renewable-energy developers and utilities supporting industrial clients with decarbonisation-linked supply offerings.

An SBTi-aligned roadmap is not just a net-zero pledge. It is a disciplined operating plan built on emissions baselines, boundary decisions, interim targets, marginal abatement cost logic, procurement strategy, technology choices and audit-ready measurement. Companies that do this well are better placed to control future compliance costs, defend export competitiveness and present a credible transition story to boards, lenders and customers.

This article sets out how Indian firms should approach SBTi-style decarbonisation roadmaps in 2026, with practical attention to data, cost, policy and implementation sequencing.

Why SBTi-style roadmaps matter in India in 2026

Several market and policy forces are converging.

First, BRSR and BRSR Core have materially improved board visibility on emissions, energy intensity, assurance and supply-chain data quality. Second, exporters are facing product-level carbon scrutiny through buyer requests and carbon-border mechanisms. Third, the India Carbon Credit Trading Scheme, or CCTS, is pushing heavy emitters toward more formal monitoring, reporting and verification structures. Fourth, domestic lenders and global investors increasingly want to see not only emissions disclosure but abatement pathways with capex discipline and implementation governance.

An SBTi-aligned pathway helps management answer five practical questions:

- What is our credible base year and emissions boundary?
- Which levers reduce emissions fastest at lowest cost?
- Which interventions need process changes, contracts or capex approvals now?
- How much of our target can be delivered by renewable electricity versus process transformation?
- What data, governance and MRV architecture will stand up to assurance, buyer review and lender diligence?



This matters because many Indian companies have a mismatch between stated ambition and executable plan. It is common to see a 2030 target without a reconciled Scope 1, 2 and 3 baseline, without a plant-wise abatement list, and without a view on procurement constraints, technology readiness or financing capacity. In 2026, that is no longer sufficient.

Step 1: Build a target-grade baseline, not a reporting-grade inventory

The first mistake companies make is assuming that a standard annual GHG inventory is enough to support target setting. It is not. A target-grade baseline requires more granularity and stronger controls.

At a minimum, Indian companies should establish:

- A fixed base year, typically one of FY2023-24, FY2024-25 or FY2025-26, depending on data completeness and structural changes
- Organisational boundary logic aligned to operational control or financial control, used consistently across sites and subsidiaries
- Separate visibility into Scope 1 stationary combustion, process emissions, mobile fuel use, fugitive emissions and captive generation
- Scope 2 accounting under both location-based and market-based approaches where relevant
- A materiality-screened Scope 3 map, especially purchased goods, upstream fuel and energy, transport, waste, capital goods and use-phase emissions where applicable
- Activity data controls at plant level, with calibration and reconciliation against ERP, utility bills, production systems and statutory records

For Indian manufacturing groups, it is useful to map emissions intensity across major facilities in terms such as tCO₂e per tonne of output, per MWh generated, per square metre, or per unit processed, depending on sector. Plant-level normalisation matters because a corporate average often hides where the real abatement opportunities sit.

Typical data quality gaps in 2026 still include diesel consumption split errors, under-accounting of refrigerant leakage, inconsistent treatment of biomass, poor capture of process emissions, mismatched renewable-power attribute accounting, and weak supplier emissions factors for Scope 3. These gaps do not just affect disclosure. They distort target setting and can send capex into the wrong levers.

This is where a robust [Carbon accounting & disclosure](/coreservices/netzerodecarbonisation/carbonaccountinganddisclosure) framework becomes foundational. The baseline must be auditable, restatable if needed, and granular enough to support abatement costing.

Step 2: Set the right target architecture for Indian operations

A credible roadmap needs more than a single net-zero year. It should include near-term and medium-term milestones that align with operational planning cycles.

In practice, Indian corporates in 2026 are increasingly using a layered target architecture:

- Near-term target to 2030 or 2035 for Scopes 1 and 2
- Defined Scope 3 target categories for the most material value-chain emissions
- Intensity targets where output growth is high and absolute targets need sector-specific interpretation
- Longer-term net-zero aspiration supported by technology assumptions for hard-to-abate emissions



The target architecture should reflect business reality. For example:

- A commercial real-estate platform may prioritise Scope 2 reduction, tenant energy engagement and refrigerant management
- A steel reroller may focus on furnace electrification, scrap strategy, renewable power and logistics fuel switching
- A chemicals producer may need separate treatment for process emissions, steam systems, feedstock choices and future green hydrogen options
- A food processor may unlock rapid gains through thermal efficiency, biomass substitution, solar-wind procurement and cold-chain optimisation

Companies should avoid setting targets that rely excessively on instruments that may not solve core operational emissions. Boards are increasingly asking how much target delivery comes from actual fuel and electricity decarbonisation versus accounting treatment, offsets or unproven technology bets.

A practical roadmap clearly distinguishes:

- Operational reductions available now

n- Contractual and procurement-led reductions

- Technology-dependent reductions likely after 2030
- Residual emissions that remain difficult or uneconomic to abate in the current decade

Step 3: Build a MACC that reflects Indian tariffs, fuels and policy realities

The marginal abatement cost curve, or MACC, is where strategy becomes decision-useful. A serious MACC in India should be built bottom-up by site and process, not from generic benchmark libraries.

Each abatement lever should specify:

- Annual emissions reduction in tCO₂e
- Upfront capex
- Change in annual opex
- Asset life
- Implementation lead time
- Internal dependencies such as shutdown windows or utility upgrades
- Counterparty dependencies such as open-access approvals or EPC timelines
- Resulting abatement cost in Rs/tCO₂e

The biggest value of a MACC is sequencing. It helps management separate no-regret actions from strategic bets.

In 2026, common no-regret and low-cost levers in Indian C&I include:

- Variable frequency drives, compressed-air optimisation and steam-system balancing
- Waste-heat recovery in suitable thermal processes
- High-efficiency motors and pump systems
- Heat integration and condensate recovery
- Rooftop solar where daytime load profile and roof quality permit



- Open-access solar, wind or hybrid procurement in states with stable banking and wheeling structures
- Furnace, boiler and burner tuning
- Leak detection for refrigerants and compressed air

Indicative economics vary by sector and state, but practitioners are seeing:

- Industrial efficiency projects often in the range of negative to Rs 2,500 per tCO₂e, depending on fuel prices and utilisation
- Open-access renewable procurement often generating net savings where displaced grid or captive thermal power costs are above Rs 5.0-7.5/kWh delivered
- Storage-backed or firmer renewable structures carrying a premium, but becoming relevant where round-the-clock decarbonisation is part of customer or group-level commitments
- Fuel switching from furnace oil or LPG to electricity becoming attractive in selected low- and medium-temperature applications where delivered power cost, uptime and retrofit complexity align

At the same time, many hard-to-abate options remain expensive in 2026:

- Deep process redesign
- High-temperature electrification in difficult duty cycles
- Green hydrogen for sectors needing reducing agents or very high-temperature heat
- Carbon capture in most Indian industrial contexts outside selected clusters or process streams

This is why [Net-zero roadmaps & MACC](/coreservices/netzerodecarbonisation/netzeroroadmapsandmacc) work best when integrated with production planning, procurement strategy and financing constraints. The question is not just which lever is cheapest, but which lever can actually be executed in the next 12 to 36 months.

Step 4: Prioritise Scope 2 intelligently, but do not let it dominate the whole roadmap

For many Indian companies, Scope 2 is the fastest and largest near-term reduction lever. But good strategy goes beyond simply signing one renewable contract.

A mature 2026 Scope 2 pathway should examine:

- Existing tariff structure, including demand charges, time-of-day components and cross-subsidy effects
- State open-access rules, banking provisions and scheduling risks
- Captive versus third-party procurement structures
- Wind-solar hybrid options for better temporal matching
- Group captive economics and legal structuring
- RTC or firming options where business continuity or customer contracts require more consistent hourly coverage
- Additionality and contract tenure implications for internal target credibility

Indicative delivered tariffs for open-access renewable supply in 2026 still vary significantly by state and contract design, but many bankable structures for large C&I users are being discussed in roughly the Rs 4.0-6.5/kWh range before the effect of balancing, standby, banking and regulatory charges is fully evaluated. That spread is exactly why board-level decisions should rely on location-specific modelling rather than headline PPA prices.



However, an over-reliance on Scope 2 can weaken a roadmap. In thermal manufacturing, Scope 1 often remains the harder and more strategic challenge. A company that reports a sharp drop in purchased-electricity emissions while leaving boilers, kilns, calcination, feedstocks or transport untouched may still face product-level carbon pressure and future compliance exposure.

The right approach is [RE-led decarbonisation]([coreservices/netzerodecarbonisation/releddecarbonisation]) combined with thermal and process interventions, not as a substitute for them.

Step 5: Address Scope 1 and hard-to-abate emissions with a staged technology pathway

Scope 1 is where many Indian companies now need better engineering realism. A credible pathway distinguishes between low-temperature heat, medium-temperature heat, high-temperature heat, process emissions, logistics fuels and fugitive emissions.

A staged pathway might look like this:

- 2026-2028: efficiency upgrades, burner optimisation, waste-heat recovery, fuel quality improvements, electrification pilots, methane and refrigerant control, logistics route optimisation
- 2028-2032: scaled electrification where grid and equipment readiness permit, deeper process redesign, biomass or biogas use where sustainable sourcing is defensible, stronger fleet transition strategy
- Post-2030: green hydrogen, e-fuels or other advanced routes for selected hard-to-abate operations where economics, infrastructure and policy support improve

Green hydrogen should be treated carefully. It may become strategic in refining, fertilisers, some chemical pathways, DRI-linked steel and selected high-temperature uses, but for many applications in 2026 it remains a future option rather than a near-term volume solution. Delivered cost expectations, storage, purity requirements, offtake certainty and equipment retrofit needs still create significant project risk.

Industrial electrification, by contrast, is moving faster in applications such as low- to medium-temperature process heat, boilers in selected contexts, material handling, on-site mobility and certain drying or heating processes. But success depends on power-quality upgrades, connection capacity, backup strategy and tariff modelling. This is where Industrial efficiency & electrification analysis needs to sit inside the carbon roadmap rather than as a separate engineering workstream.

Step 6: Make the roadmap financeable and assurance-ready

A decarbonisation roadmap that cannot win budget approval or survive diligence is only a presentation. In 2026, companies should package their SBTi-style pathways in a way that works for CFOs, lenders and investment committees.

That means translating emissions strategy into a capital-allocation framework:

- Quick-payback efficiency bucket, usually under 3 years
- Mid-tenor infrastructure and procurement bucket, often 3-7 years
- Strategic transformation bucket with longer lead times and technology risk
- Pilot budget for emerging pathways such as hydrogen, thermal storage or advanced process redesign

Boards should also ask for scenario analysis under different assumptions for:

- Grid emission factor evolution
- Coal, gas, furnace oil and biomass price changes



- Carbon cost under domestic compliance or buyer pressure scenarios
- Open-access policy shifts by state
- Export market carbon pass-through
- Growth, utilisation and product-mix changes

A financeable roadmap also requires a clear MRV design. Each abatement lever should have a measurement protocol, ownership, baseline method and audit trail. This is increasingly important because one set of data may need to serve multiple purposes at once: BRSR Core, customer questionnaires, internal target tracking, lender covenants, CCTS-linked readiness and potential carbon-market participation.

Strong governance usually includes:

- Board or sustainability committee oversight
- Plant-level energy and emissions owners
- Quarterly target-tracking dashboard
- Documented emissions-factor hierarchy
- Change-control process for baseline restatement after acquisitions, divestments or major process shifts
- Internal audit and external assurance plan

Without this, even well-designed targets can drift into inconsistent reporting and weak implementation accountability.

What Indian stakeholders should do next

For industrial energy consumers, the immediate priority is to move from disclosure-grade inventories to target-grade baselines and site-level MACCs. For developers and utilities, the opportunity is to offer decarbonisation solutions that solve client emissions and reliability problems together, not just sell standalone electrons. For lenders, better scrutiny of baseline quality, MRV design and abatement sequencing will improve transition-credit decisions. For policymakers, stable implementation rules across renewable procurement, electrification and carbon-market MRV will lower the cost of industrial transition.

In practical terms, a strong 2026 roadmap should produce the following outputs within 8 to 16 weeks for a focused business unit or corporate portfolio:

- Base-year emissions inventory with restatement logic
- Plant-wise emissions hotspot map
- Prioritised abatement lever register
- MACC with capex, savings and implementation timelines
- Scope 2 procurement strategy by state and facility
- Hard-to-abate technology pathway with decision gates
- Governance and MRV architecture
- Board-ready target options with financial sensitivity analysis

That is the level of rigour the market now expects. The winners will be companies that treat decarbonisation as an operating and capital-allocation discipline, not just a reporting exercise.

If your organisation is evaluating target setting, implementation sequencing or lender-ready transition plans, Growthifye's advisory desk can help build a practical roadmap covering baselines, abatement economics,



procurement strategy and MRV. Contact Growthifye to discuss a financeable decarbonisation pathway for your portfolio or plant network.

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).

ABOUT THE AUTHOR

Sudarshan Karweer — Chief Executive Officer, Growthifye

Over 23 years in management consulting — concept to scale — building and scaling new-age digital and energy businesses. An EY alumnus, Sudarshan leads Growthifye's renewable energy & storage advisory, EPC, transmission engineering and green-financing practices for developers, utilities and C&I consumers across India.
Contact: info@growthifye.com · +91 84510 99371 · growthifye.com

This article is for general information only and does not constitute engineering, financial or legal advice. © Growthifye. Sharing with attribution is welcome.