

Rise & Reflect

E-NEWSLETTER

NOVEMBER 2025



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[Set up by an Act of Parliament]



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From the desk of Chairman.....



“उद्यमेन हि सिद्ध्यन्ति कायर्णि, न मनोरथैः।”

Dear Esteemed Members,

November 2025 will be remembered as one of the most vibrant and impactful months in the journey of the Jaipur Branch. The scale, diversity, and depth of activities conducted during the month truly reflected our collective commitment towards professional excellence, student development, and institutional leadership.

The highlight of the month was the All India Excellence Conference of CA Students –

“निर्मिताणः: Creating Excellence, Shaping Futures.”

This national-level platform brought together students from across the country and offered them an opportunity to engage with ideas that go far beyond examinations and syllabi.

The theme “**निर्मिताणः:**” beautifully

captured the spirit of self-construction, discipline, and purposeful growth. Through academic sessions, motivational interactions, and value-based discussions, the conference encouraged students to envision themselves not merely as professionals, but as responsible contributors to society and the economy.

In addition to this flagship event, the month witnessed multiple student-centric initiatives that tested analytical ability, creativity, communication, and confidence. Such platforms play a crucial role in shaping well-rounded professionals and reinforce our belief that excellence must be cultivated holistically from the early stages of the professional journey.

November was equally significant for members, with several technical and professional forums focusing on emerging challenges, regulatory expectations, and leadership perspectives. These programs provided an opportunity for members to deliberate, exchange experiences, and strengthen their professional judgment in a rapidly evolving environment.

What made November truly remarkable was the seamless execution of large-scale programs with discipline and academic focus. Behind every successful initiative stood a dedicated team of volunteers, faculty members, and branch staff whose tireless efforts ensured quality and precision. Their silent contribution deserves heartfelt appreciation.

As Chairman, I see November as a reflection of what the Jaipur Branch stands for — vision, execution, and inclusivity. It demonstrated our capability to host national platforms while remaining deeply connected to students and members at the grassroots level.

As we move forward, let us carry the momentum built during this month and continue working towards initiatives that inspire learning, strengthen values, and shape futures — true to the spirit of “**निर्मिताणः:**”

Warm regards,



CA. Vikas Yadav

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From the desk of Secretary.....



“संगठने शक्ति, समर्पणं सफलता।”

Respected Members,

November 2025 showcased the Jaipur Branch at its organizational best. From planning to execution, the month reflected disciplined coordination, teamwork, and a strong sense of ownership across all activities.

The All-India Excellence Conference of CA Students – “निमिनाणः: Creating Excellence, Shaping Futures” was a defining event of the month. Coordinating a national-level student conference requires meticulous planning, effective communication, and continuous coordination across teams. The smooth execution of the conference stands as a testament to the strength of our branch's administrative systems and the cooperation extended by members, volunteers, and staff. More importantly, the conference delivered meaningful academic and motivational value to students, aligning perfectly with its objective of shaping confident and value-driven professionals.



Alongside the national conference, the month included several student talent and academic initiatives, each conducted with transparency, fairness, and enthusiasm. From registrations to evaluations, every process reflected professionalism and discipline, ensuring that participants felt encouraged and respected.

November also witnessed strong engagement from members despite demanding professional schedules. Technical programs and interactive forums were planned keeping relevance and timing in mind, and the response reaffirmed the members' commitment towards continuous learning.

From a secretarial perspective, November was intense yet fulfilling. Back-to-back programs required adaptability, precise scheduling, and constant coordination. I sincerely acknowledge the efforts of faculty members, volunteers, and branch staff who ensured that every detail was handled with care.

The month also allowed us to strengthen internal systems such as documentation, feedback mechanisms, and future planning frameworks. These efforts form the backbone of consistent quality delivery and sustainable growth.

As Secretary, I take pride in being part of a branch that continues to grow not only in scale but also in efficiency and reliability. The achievements of November belong to every individual who contributed through participation, effort, and trust.

Warm Regards,

CA. Yash Gupta
Secretary



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Environmental Accounting: Concepts, Practice, and Decision Usefulness



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CA RAHUL SHARMA

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Executive Summary

Environmental accounting integrates environmental costs, benefits, risks, and externalities into mainstream financial management and reporting. It equips boards, audit committees, and management with decision-useful metrics that link ecological performance with cash flows, enterprise value, and risk-adjusted returns. This article develops the subject comprehensively—from conceptual foundations and global frameworks to advanced tools such as material flow cost accounting (MFCA), shadow pricing, internal carbon pricing, lifecycle costing, and e-liabilities. We include industry-focused illustrations for cement, steel, information technology (IT), and automobile sectors, as well as numerical models and corporate case studies germane to Indian practice (BRSR, Ind AS, and regulatory context).

1. Concept and Scope of Environmental Accounting

Environmental accounting is the identification, measurement, recognition, and reporting of environmental costs and benefits that arise from an entity's impact on, or dependence upon, natural capital. It spans two complementary domains: (a) environmental financial accounting—recognition of provisions, asset retirement obligations, impairment, and environmental assets; and (b) environmental management accounting—internal decision-support information on resource efficiency, abatement options, and project appraisal. The discipline extends the traditional cost–benefit boundary by pricing externalities and integrating physical (mass/energy) and monetary accounts.

1.1 Objectives

- Enable better capital allocation to resource-efficient technologies.
- Quantify and manage environmental liabilities and contingent obligations.
- Support regulatory compliance and investor-grade ESG disclosures.
- Translate physical footprints (emissions, water, waste) into financial impacts.

- Enhance resilience by embedding environmental risks into enterprise risk management (ERM).

1.2 Linkages with Financial Reporting under Ind AS/IFRS

- Ind AS 37 / IAS 37: provisions, contingent liabilities, onerous contracts, decommissioning and restoration obligations.
- Ind AS 16 / IAS 16: capitalization of environmental components (e.g., emission control equipment) and asset retirement costs.
- Ind AS 36 / IAS 36: impairment testing where environmental constraints impact recoverable amount.
- Revenue and government grants (Ind AS 20): accounting for environmental grants and incentives.
- Uncertain tax positions for environmental levies/credits and carbon-pricing regimes (as applicable).

2. Frameworks and Reporting Architecture

Corporate reporting increasingly combines financial statements with sustainability disclosures. In India, Business Responsibility and Sustainability Reporting (BRSR) requires the top listed entities to disclose environmental metrics (energy, emissions, water, waste) and policies. Global frameworks frequent in practice include the UN's System of Environmental-Economic Accounting (SEEA), the Global Reporting Initiative (GRI), the Greenhouse Gas (GHG) Protocol (Scopes 1–3), the Integrated Reporting (<IR>) framework, and the IFRS/ISSB sustainability disclosure standards that seek investor-focused, decision-useful metrics. Management accountants rely on these structures to ensure consistency and comparability of measures that ultimately inform valuations and lending decisions.

3. Measurement Building Blocks

3.1 Physical Flow Mapping

Measurement begins with a physical inventory of inputs (materials, water, fuels, electricity), intermediate outputs

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(work-in-process, waste heat), and outputs (products, by-products, emissions, waste). Metering, energy audits, water balances, and material flow diagrams provide the basis for linking quantities to costs. The accuracy of cost allocation depends on the fidelity of these physical measures.

3.2 Cost Classification

- Direct environmental costs: treatment chemicals, effluent charges, emission control O&M.
- Capital costs: abatement equipment, zero-liquid-discharge (ZLD) plants, waste heat recovery, solar rooftops.
- Compliance costs: monitoring, testing, permits, audits.
- Liabilities and decommissioning: mine reclamation, ash-pond closure, pipeline removal.
- Opportunity costs and externalities: lost productivity during retrofits, social cost of carbon (shadow price).

3.3 Material Flow Cost Accounting (MFCA)

MFCA assigns costs to both positive products and negative products (losses/waste) based on physical flow quantities and the full cost of materials, energy, systems, and disposal. The method often reveals that 'waste' embodies hidden material and energy costs far exceeding disposal fees. MFCA thus converts invisible losses into visible profit-improvement opportunities.

3.4 Shadow Pricing and Internal Carbon Pricing

Where market prices are missing or incomplete (e.g., CO₂ externalities), entities can apply shadow prices derived from regulatory trajectories or social cost estimates. Internal carbon prices—either a fee or a shadow price used in investment appraisal—steer capital allocation towards low-emission technologies. Typical internal prices range widely; sensitivity analysis around multiple carbon price paths is essential to avoid single-point bias.

3.5 Lifecycle Costing and Total Cost of Ownership (TCO)

Environmental choices frequently change cost profiles over asset life. Lifecycle costing consolidates capex, O&M, efficiency gains, downtime, decommissioning, and residual values. For comparable alternatives (e.g., conventional vs. low-carbon equipment), net present value (NPV) and internal rate of return (IRR) on a lifecycle basis provide decision

discipline.

4. Numerical Illustrations

4.1 MFCA in a Process Plant

Assume a chemical plant purchases 10,000 tonnes of input at ₹40,000/tonne (materials ₹30,000, conversion energy ₹7,000, handling and other ₹3,000). Output comprises 8,500 tonnes of saleable product and 1,500 tonnes of losses (off-spec/rejects and waste). Conventional accounting books only disposal cost of losses (₹2,000/tonne). MFCA allocates the full embedded cost to losses:

$$\text{Cost embodied in losses} = 1,500 \times ₹40,000 = ₹600 \text{ crore.}$$

$$\text{Disposal cost} = 1,500 \times ₹2,000 = ₹30 \text{ lakh (only 0.5\% of true loss).}$$

A project that reduces losses by 300 tonnes saves $300 \times ₹40,000 = ₹12 \text{ crore per year}$ —far exceeding the mere disposal saving of ₹60 lakh. If the capex is ₹20 crore with 10-year life and zero salvage, discount rate 12%, the NPV of savings (annuity) is: $PV = 12 \times (1 - 1/1.12^{10})/0.12 \approx ₹67.6 \text{ crore}$; $NPV \approx ₹47.6 \text{ crore}$; $IRR > 50\%$. MFCA re-prioritizes such projects to the top of the capex queue.

4.2 Internal Carbon Price in Project Appraisal

A cement grinding unit considers two motors: Option A (standard) capex ₹8 crore; Option B (high-efficiency) capex ₹10 crore; both 10-year life. Option B saves 6 million kWh/year. Grid emission factor 0.8 tCO₂/MWh → emissions avoided = 4,800 tCO₂/year. Electricity cost ₹7/kWh → cash saving ₹4.2 crore/year. Without carbon pricing, payback of Option B's incremental ₹2 crore is ~7 months. With an internal carbon price of ₹2,000/tCO₂, additional 'carbon benefit' valued at ₹9.6 crore over 10 years undiscounted (or ~₹6.1 crore PV at 10%), further strengthening the case. The illustration shows how internal pricing influences not only environmental metrics but also economic prioritisation.

4.3 Provisioning for Decommissioning under Ind AS 16/37

A thermal plant constructs a flue-gas desulphurisation (FGD) unit requiring gypsum stack removal at end of life (year 15). Estimated dismantling and site restoration cost is ₹90 crore in nominal terms; expected inflation 5% p.a.; pre-tax discount rate 10% p.a. Present value at inception: Future cost in real terms $\approx ₹90 / (1.05)^{15} \approx ₹43.3 \text{ crore}$; PV =

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$43.3 / (1.10)^{15} \approx ₹10.4$ crore (approximation when building from nominal to real and discounting). The PV is capitalised with the asset and a corresponding decommissioning provision recognised. Over life, unwind the discount as finance cost and adjust the asset carrying amount for updated estimates. Impairment testing under Ind AS 36 must reflect any adverse regulatory changes that reduce recoverable amount.

5. Corporate Case Studies (Illustrative)

The following case studies—constructed from realistic industry contexts—illustrate how Indian and global corporates design environmental accounting to serve strategy, capital allocation, and assurance. Figures are illustrative for pedagogy and can be adapted with company-specific data during an engagement.

5.1 Power Utility: Integrating Emissions Control and Carbon Markets

Context: A listed utility (Utility X) operates 10 GW of coal-based capacity. Compliance requires FGDs and low-NOx burners. Environmental accounting mapped capex (₹12,000 crore), O&M (₹600 crore/year), energy penalties (0.8% heat rate), and monetised benefits: (a) penalty avoidance; (b) ability to sell higher-sulphur coal within norms; (c) potential carbon revenues from renewable replacements. **Outcomes:** The board approved a phased retrofit using a portfolio NPV lens. A shadow carbon price of ₹1,500/tCO₂ guided sequencing—older, inefficient units were retired and replaced with 3 GW solar-wind hybrids. Provisions were recognised for ash pond closure under Ind AS 37; asset retirement costs capitalised under Ind AS 16. BRSR metrics tracked SO₂, NOx, PM, water intensity, and ash utilisation ratios. Assurance revisited assumptions annually to align decommissioning provisions with actual market rates.

5.2 Consumer Goods: Plastic Footprinting and EPR Liabilities

Context: A fast-moving consumer goods (FMCG) company (FMCG Y) faced Extended Producer Responsibility (EPR) targets for plastic. Environmental accounting established a plastic mass balance across SKUs, materials, and geographies. Costs included recycled resin premiums, collection and processing, and brand-reputation risk.

Numerical highlight: Baseline virgin plastic 60,000 tonnes/year. Plan to substitute 20% with recycled content at

₹18/kg premium → incremental cost ₹216 crore/year. Countervailing benefits: avoided EPR penalties ₹150 crore/year; marketing uplift quantified via price-mix at ₹90 crore/year; risk reduction benefit (shadow) ₹30 crore/year. Net annual benefit ₹54 crore despite premium costs; further upside through design-for-recycling reduced sku-level material use by 3% equating to ₹45 crore/year in material savings. Accounting treatment recorded EPR obligations as provisions when present obligations existed and costs were reliably measurable.

5.3 IT Services: Data Centre Energy and Water Accounting

Context: An IT major (IT Z) runs captive data centres and large leased colocation capacity. Environmental accounting integrated Power Usage Effectiveness (PUE), renewable energy PPAs, battery storage, and water-side economisers. **Numerical highlight:** Migrating 60% of workloads to a hyperscaler with 1.2 PUE from on-prem 1.8 PUE cuts facility energy by ~33%. With annual IT load 100 GWh, facility energy falls from 180 GWh to ~144 GWh—saving 36 GWh/year. At ₹7/kWh → ₹25.2 crore/year, plus ~28,800 tCO₂/year avoided (0.8 t/MWh). Contracts embedded green-attribute delivery; disclosures under BRSR and GHG Protocol captured Scope 2 location- and market-based emissions; supplier-engagement captured Scope 3 (upstream colocation).

5.4 Metals: Slag Valorisation and Water Stewardship

Context: A steel producer (Steel A) sought to monetise blast furnace slag via grinding into GGBS for cement markets and to reduce freshwater withdrawal through zero-liquid-discharge. **Numerical highlight:** Converting 1.2 million tonnes/year of granulated slag into GGBS at ₹1,800/tonne margin yields ₹216 crore/year while displacing higher-clinker cement and reducing sectoral CO₂. MFCA re-allocated utilities and maintenance to reveal under-recovered costs in the slag-granulation line, leading to a ₹35 crore/year improvement. Provisions for legacy slag-heap remediation were measured and recognised under Ind AS 37 with phased utilisation against actual works.

6. Industry-Specific Illustrations

6.1 Cement

Key drivers: clinker factor, thermal substitution rate (TSR) for alternative fuels, electrical specific energy, and logistics. Environmental accounting quantifies the financial and carbon

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impacts of clinker substitution (fly ash, slag, calcined clay), waste-heat recovery power (WHR), and rail logistics. Internal carbon pricing aligns kiln upgrade decisions with long-run emission trajectories.

Numerical Illustration – Clinker Factor Reduction: A 6 MTPA cement company reduces clinker factor from 0.78 to 0.72 using calcined clay. Each 0.01 reduction avoids $\sim 7-8$ kg CO₂ per tonne cement; assume 7.5 kg. Annual cement 6,000,000 t \rightarrow CO₂ avoided $\approx 0.06 \times 7.5 \times 6,000,000 = 2,700,000$ kg = 2,700 t? This quick check shows unit conversions matter. Correct treatment: Avoided clinker per tonne cement = 0.06 t; clinker emission factor ≈ 0.85 tCO₂/t; CO₂ avoided $\approx 0.06 \times 0.85 = 0.051$ tCO₂ per tonne cement. Annual avoidance = $0.051 \times 6,000,000 \approx 306,000$ tCO₂/year. At ₹1,500/t internal price, shadow benefit \approx ₹459 crore over 10 years undiscounted, alongside fuel and power savings. Financially, reduced kiln heat accounts for ~ 60 kcal/kg-clinker benefit; WHR adds ₹60–80 crore/year in power offsets depending on tariff.

Accounting Points: (a) capitalisation of WHR plant under Ind AS 16; (b) provisions for quarry rehabilitation; (c) carbon-related intangible benefits not recognised as assets unless meeting identifiable, controllable criteria; (d) BRSR and GRI disclosures for energy, emissions, and alternative fuels; (e) impairment testing when carbon prices/regulations materially reduce recoverable amount of older, wet-process lines.

6.2 Steel

Key drivers: route (BF-BOF vs. EAF/DRI), scrap availability, coke rate, and process gas recovery. Environmental accounting compares capital pathways—e.g., a hybrid BF with top-gas recycling and H₂-ready DRI modules vs. status-quo relining—on a lifecycle basis including decommissioning.

Numerical Illustration – EAF Shift: A 5 MTPA integrated steel plant evaluates a 1.5 MTPA EAF using 90% scrap and 10% DRI. Capex ₹6,000 crore; OPEX advantage ₹1,400/tonne over BF route at current energy and carbon assumptions; Scope 1+2 emissions fall from ~ 2.0 to ~ 0.5 tCO₂/t. Annual benefit ≈ 1.5 million \times ₹1,400 = ₹2,100 crore. CO₂ avoidance $\approx (1.5 \times (2.0 - 0.5)) = 2.25$ million tCO₂/year. With an internal price ₹2,000/t, shadow value ₹4,500 crore/year. Even after adjusting for scrap premia and power tariffs, the lifecycle NPV dominates the reline option. Provisions for closure of a coke battery and remediation are recognised with appropriate discounting and

periodic re-measurement.

6.3 Information Technology (IT)

Key drivers: data centre efficiency (PUE), renewable power procurement (PPAs, RECs), end-user device lifecycles, and business travel. Environmental accounting ties IT procurement to Scope 2 and Scope 3 outcomes via supplier scorecards and e-waste take-back provisions. Capital decisions around efficient servers (high core density, liquid cooling) are assessed on TCO with carbon-linked hurdle rates. Accounting for renewable PPAs requires careful analysis of lease vs. supply arrangements and recognition of green attributes.

6.4 Automobile

Key drivers: platform mix (ICE vs. EV), supply-chain emissions (battery materials), manufacturing energy, and end-of-life recovery. Environmental accounting supports make-vs-buy for batteries, design-for-remanufacture, and take-back liabilities.

Numerical Illustration – EV Battery Provision: An OEM sells 100,000 EVs/year with an 8-year warranty. Expected battery replacements at 3% probability in years 5–8 cost ₹2.2 lakh each in current terms. Present value of expected obligation (simplified): PV $\approx 100,000 \times 0.03 \times$ ₹220,000 \times discount factor for mid-term (say 7% over 6.5 years \rightarrow factor ≈ 0.65) \approx ₹429 crore. Recognise a warranty provision under Ind AS 37; simultaneously build a recycling system generating recovered metals worth ₹40,000 per pack (expected value). MFCA highlights that design changes reducing failure rates by 1 percentage point lower provisions by \sim ₹143 crore PV, easily justifying incremental quality capex.

7. Advanced Topics

7.1 E-Liabilities and Traceable Emissions Accounting

The e-liabilities concept treats emissions as a liability that travels with products through the value chain. Each product carries an 'emission ledger' that suppliers transfer to customers, enabling auditable Scope 3 accounting and preventing double counting. For management, e-liabilities create a uniform unit of account that can be priced in procurement, contracts, and margin analyses. Implementing

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e-liabilities requires robust data governance, digital product passports, and contract clauses on emissions data rights.

7.2 Carbon Markets and Emission Certificates

Where emission trading schemes (ETS) or certificate markets exist, accounting policies must address initial recognition, measurement, and subsequent changes in the value of allowances/credits. The now-withdrawn IFRIC 3 left a gap; entities generally adopt an accounting policy consistent with Ind AS/IFRS concepts: (a) purchased allowances as intangible assets (cost model) and (b) obligations to surrender allowances as provisions measured at the best estimate of allowances required, remeasured through profit or loss. Disclosures explain policy choices, fair value exposure, and sensitivity to price volatility. Treasuries must manage mismatches between allowance inventories and compliance liabilities to avoid P&L volatility.

7.3 Water Accounting and Scarcity Pricing

In water-stressed geographies, volumetric tariffs understate scarcity. Environmental accounting can apply scarcity multipliers or shadow prices reflecting opportunity costs to communities and agriculture. Projects such as closed-loop cooling, rainwater harvesting, and effluent recycling are then appraised on an augmented NPV basis. Where legal obligations exist for zero-liquid-discharge or groundwater replenishment, provisions are recognised when obligations are present and measurable.

7.4 Nature-Related Risks and TCFD/TNFD-Aligned Disclosures

Entities increasingly assess climate- and nature-related risks: physical risks (heat, flood, drought), transition risks (policy, technology, market), and liability risks. Scenario analysis (e.g., 1.5°C vs. 3°C pathway) informs impairment testing and capital budgeting. The governance-strategy-risk-metrics architecture ensures that risk management and internal audit test the reliability of environmental data that feeds financial statements and investor disclosures.

8. Governance, Controls, and Assurance

Environmental accounting must be anchored in internal controls comparable to financial reporting maturity. Key elements include: (a) ownership of metrics in business units;

(b) standard operating procedures for metering and estimation; (c) segregation between preparers and reviewers; (d) IT general controls over sustainability systems; and (e) independent assurance on selected KPIs. The audit committee should integrate environmental risks within the overall assurance map and ensure consistency between BRSR/ESG narratives and financial statement implications (provisions, impairments, capitalisation).

9. Managerial Dashboards and Decision Support

A practical dashboard links physical KPIs with financials and risk:

Energy intensity (kWh/tonne, kcal/kg-clinker) paired with energy cost variance.

CO₂ intensity (tCO₂/unit) paired with internal carbon cost and external exposure.

Water withdrawal and discharge intensity paired with scarcity pricing and compliance status.

Waste generation and utilisation paired with MFCA-derived loss value.

Project portfolio tracking with NPV/IRR, payback, and carbon abatement cost (₹/tCO₂).

10. Implementation Roadmap (12–18 Months)

1. Baseline: establish physical and monetary baselines; validate meters; compile opening balances for provisions and decommissioning liabilities.
2. Policy and Methodology: define accounting policies (carbon credits, EPR, decommissioning, impairment triggers); document MFCA and shadow pricing methods.
3. Systems and Data: integrate ERP with energy/water systems; establish emission-factor libraries and master data governance.
4. Controls and Assurance: institute SOPs, access controls, and internal audit checks; prepare for limited/reasonable assurance on selected KPIs.
5. Capital Allocation: embed internal carbon price in capex approvals; prioritise high-NPV abatement options.
6. Disclosure Readiness: align BRSR/GRI metrics with board-approved narratives; ensure consistency with Ind AS financials.

11. Comprehensive Numerical Case: Integrated Plant Decarbonisation

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Consider an integrated industrial site comprising a cement kiln (3 MTPA), captive power (200 MW), and an automotive components plant. The company contemplates a decarbonisation programme with five levers: (1) WHR in cement (20 MW), (2) solar PPA (250 GWh/year), (3) kiln upgrade lowering clinker factor from 0.78 to 0.70, (4) electric furnaces in components replacing gas, and (5) logistics shift to rail for 40% of outbound volume.

Financial and Environmental Impacts (annual):

1. WHR 20 MW at 7,000 FLH \rightarrow 140 GWh; avoided grid power ₹7/kWh \rightarrow ₹98 crore; capex ₹900 crore; O&M ₹9 crore; CO₂ avoided 112,000 t (0.8 t/MWh).
2. Solar PPA 250 GWh at ₹4/kWh vs. grid ₹7 \rightarrow savings ₹75 crore; CO₂ avoided 200,000 t.
3. Clinker factor 0.78 \rightarrow 0.70 for 3 MTPA cement: avoided clinker $0.08 \times 3,000,000 = 240,000$ t; at 0.85 tCO₂/t \rightarrow 204,000 t; fuel saving ₹180/tonne clinker \rightarrow ₹43.2 crore.
4. Electric furnaces save 20% energy on 60,000 t components; energy cost reduction ₹22 crore; CO₂ avoided 30,000 t.
5. Rail modal shift avoids 18,000 tCO₂ and saves ₹15 crore freight due to scale benefits.

Portfolio Appraisal: Aggregate annual savings \approx ₹253 crore; aggregate CO₂ avoidance \approx 564,000 t. Assume combined capex ₹1,400 crore (WHR ₹900, furnaces ₹250, logistics ₹50, process upgrade ₹200); programme O&M increment ₹16 crore. With a 12-year horizon and 11% discount rate, PV of cash savings (net of O&M) \approx ₹253-16 = ₹237 crore/year annuity \rightarrow PV \approx ₹237 \times 6.495 \approx ₹1,540 crore; NPV \approx ₹140 crore excluding shadow carbon. At internal carbon price ₹1,500/t, carbon value \approx 564,000 \times 1,500 = ₹846 crore/year (policy shadow, not booked). Sensitivity: if power tariffs fall to ₹5/kWh, PV reduces \approx ₹440 crore but NPV remains positive due to multi-lever synergy. Accounting: capitalise WHR and furnaces; recognise decommissioning obligations where applicable; provide for EPR/logistics compliance changes as evidence arises; test impairment of legacy assets if carbon costs accelerate.

12. Practical Checklists for Controllers and CFOs

- Map environmental obligations: permits, EPR, decommissioning, remediation, take-back/warranty, water commitments.
- Review recognition thresholds: present obligation +

reliable estimate (Ind AS 37).

- Ensure decommissioning costs are capitalised with the related asset and discount unwinding is recorded as finance cost.
- Validate emission factors, activity data, and meter calibration; reconcile physical and monetary ledgers.
- Define accounting policy for carbon credits/allowances; disclose judgements and sensitivities.
- Integrate internal carbon price into investment approvals; maintain scenario-based hurdle rates.
- Align BRSR/GRI disclosures with financial statement notes; cross-check for consistency.

13. Limitations and Professional Judgement

Environmental accounting involves estimation uncertainty (e.g., future remediation costs, emission factors, policy trajectories). Professional judgement is required to select discount rates, useful lives, impairment triggers, and shadow prices. Transparent disclosure of methodologies and sensitivities is essential to maintain credibility with auditors, lenders, and investors. Where data quality is evolving, conservative provisioning and clear documentation reduce the risk of restatements.

14. Conclusion

Environmental accounting is now central to value creation and risk management. It brings environmental externalities into the language of finance, enabling disciplined capital allocation, robust provisioning, and decision-useful disclosure. For Indian corporates—especially in energy- and material-intensive sectors—integrating MFCA, shadow pricing, lifecycle costing, and e-liabilities into financial and managerial processes can unlock substantial cash savings while future-proofing against regulatory and market transitions. The controller's craft—measurement, recognition, estimation, and disclosure—remains the bridge between sustainability ambition and bankable, auditable outcomes.

The Future Role of Chartered Accountants in a Data-Driven and Faceless Tax Regime



E-NEWSLETTER



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Introduction

The Chartered Accountancy profession in India is witnessing a paradigm shift driven by technology-led governance, faceless tax administration, and data-centric regulatory oversight. The traditional compliance-focused role of a CA is gradually evolving into that of a tax strategist, data interpreter, and risk advisor. For CA students, understanding this transformation is essential to remain professionally relevant in the coming decade.

1. Faceless Regime and the Changing Dynamics of Tax Practice

The introduction of Faceless Assessment, Faceless Appeal, and Faceless Penalty proceedings under the Income-tax Act, 1961 has fundamentally altered the manner in which tax litigation and representation is carried out.

Key technical implications include:

- Elimination of physical interface with tax authorities
- Increased reliance on drafting precise, legally robust, and evidence-backed submissions
- Greater importance of natural justice, timelines, and procedural compliance
- Centralised risk-based selection of cases using analytics

Future CAs must develop expertise in legal drafting, digital evidence presentation, and interpretation of algorithm-based notices. The ability to identify jurisdictional errors, limitation issues, and violation of principles of natural justice will be critical in appellate success.

2. GST: From Return Filing to Data Reconciliation and Litigation

GST has matured from a return-filing law to a data-driven tax ecosystem. Auto-populated returns, e-invoicing, e-way bills, and system-based mismatch notices have significantly increased the compliance complexity.

Key areas where future CAs will play a crucial role:

- ITC eligibility analysis vis-à-vis Sections 16, 17, and Rule 36 of CGST Rules
- Reconciliation of GSTR-1, GSTR-3B, GSTR-2B, e-invoicing, and books of accounts
- Handling GST DRC-01, DRC-01A, and audit-related proceedings
- Advising on classification, valuation, and place of supply issues

The future CA must move beyond return filing and become a GST risk manager and litigation advisor, capable of handling departmental audits and investigations.

3. Rise of Forensic Accounting and Risk Advisory

With increased focus on financial frauds, shell entities, fake invoicing, and money laundering, forensic accounting is emerging as a high-value domain for CAs.

Technical skill sets required include:

- Analysis of financial statements, bank trails, and transactional patterns
- Understanding of Benami Act, PMLA, Companies Act, and SEBI regulations
- Use of data analytics tools to identify anomalies
- Preparation of forensic reports for regulatory and judicial use

This shift positions CAs as investigators and expert witnesses, expanding career opportunities beyond traditional practice.

4. Automation, AI, and the End of Routine Compliance Work

Automation is rapidly reducing manual work in areas like bookkeeping, return filing, and basic reconciliations. However, technology cannot replace professional judgment.

Future relevance will depend on:

- Ability to interpret data outputs generated by systems

Conti...

The Future Role of Chartered Accountants in a Data-Driven and Faceless Tax Regime

- Advising clients on tax planning vs tax avoidance
- Designing internal controls and compliance frameworks
- Providing virtual CFO and strategic advisory services

Thus, technology is not a threat but a force multiplier for skilled CAs.

5. Skills CA Students Must Develop for the Future

To remain competitive, CA students should focus on:

- Strong command over tax laws and judicial precedents
- Practical exposure during articleship
- Drafting replies to SCNs, audit objections, and appellate submissions

- Learning basics of data analytics, Excel automation, and ERP systems
- Upholding ethics and professional skepticism

Conclusion

The future of the Chartered Accountancy profession lies in specialisation, analytical capability, and strategic advisory. Compliance will be automated, but interpretation, representation, and judgment will always require a CA. Students who invest in technical depth and continuous learning will not only survive but lead the profession forward.

The CA of the future is not just a compliance professional—but a trusted advisor in a complex regulatory environment.

Advisory vs Compliance: Where the Real Value Lies for Chartered Accountants



CA Soumya Gupta

For decades, compliance has been the backbone of the Chartered Accountancy profession. Tax filings, audits, returns, certifications, and regulatory reporting have ensured that businesses operate within the legal framework. Compliance work built trust, credibility, and stability for the profession.

However, the business environment is changing rapidly. Automation, technology platforms, and regulatory standardisation are steadily reducing the perceived value of routine compliance. Today, the real question facing Chartered Accountants is not whether compliance will remain important but **whether compliance alone is enough**.

The Compliance Comfort Zone

Compliance work is structured, deadline-driven, and relatively low-risk when executed properly. It provides predictable revenue and ensures regular client interaction. For many CA firms, especially small and mid-sized practices, compliance continues to be the primary source of income.

Yet, compliance has certain inherent limitations:



As regulations become more standardised and technology-driven, compliance is increasingly viewed as a hygiene factor essential, but not distinctive.

The Rise of Advisory Services

Advisory work focuses on **interpretation, insight, and decision-making**, rather than mere execution. It involves helping clients understand *what the numbers mean* and *what actions should follow*. It's time for not play the odds, rather play the man.

Examples of advisory services include:

- Business restructuring and financial planning
- Tax strategy and optimisation
- Cash flow management and working capital



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advisory

- Risk assessment and internal control design
- Transaction support, valuations, and due diligence

Unlike compliance, advisory services are **future-oriented**. They directly impact business outcomes, which makes clients willing to pay a premium for expertise and judgment.

Why Advisory Creates Real Value

The real value of a CA lies in professional judgment, analytical thinking, and ethical decision-making, skills that cannot be automated.

Advisory services:

- Position CAs as **business partners**, not service providers
- Strengthen long-term client relationships
- Offer **higher margins and professional satisfaction**
- Enhance the strategic relevance of the profession

Clients no longer seek just compliance, they seek **clarity, foresight, and confidence**.

The Compliance: Advisory Balance

This does not imply abandoning compliance. In fact, compliance often acts as the **entry point** for advisory. Deep involvement in a client's compliance framework gives CAs unmatched insight into their operations, risks, and financial health.

The key lies in **leveraging compliance knowledge to offer advisory value**:

- Turning financial statements into performance insights
- Converting tax filings into strategic tax planning discussions

Conti...

Advisory vs Compliance: Where the Real Value Lies for Chartered Accountants

- Using audit findings to improve governance and controls

Skills CAs Must Develop

To transition from compliance to advisory, CAs must invest in:



Most importantly, CAs must shift their mindset from “reporting the past” to **shaping the future**.

Conclusion

Compliance will always remain a fundamental responsibility of the Chartered Accountancy profession. However, **advisory is where differentiation, growth, and long-term relevance lie**.

The future CA is not just a guardian of compliance, but a **trusted advisor** one who helps businesses navigate uncertainty, make informed decisions, and create sustainable value.

In an era where technology can do the routine, **the real value of CAs lies in insight, integrity, and judgment**.

Pink City to Unicorn City: The Chartered Accountant's Role in Scaling Rajasthan's Startup Ecosystem



CA Jyoti Sharma

For decades, Rajasthan's economic identity was synonymous with the **"Three Ts": Textiles, Tourism, and Tradition**. However, as we step into 2026, a new "T" is taking center stage: **Technology**.

With the rise of startups across sectors such as EdTech, FinTech, AgriTech, Handicrafts, Tourism, and SaaS, Rajasthan is steadily moving from tradition to transformation. At the heart of this transition stands an often under-appreciated catalyst: **the Chartered Accountant**.

As Chartered Accountants, we are the architects of this transition. While founders provide the vision, CAs provide the structural integrity required to scale that vision into a billion-dollar reality.

The Rajasthan Momentum: A Fertile Ground

The state government's flagship **iStart Rajasthan** initiative has decentralized innovation. With incubation centers like the **Techno Hub** in Jaipur and specialized **"Nests"** in Kota, Udaipur, and Jodhpur, the infrastructure is ready.

However, scaling a startup in a Tier-2 city presents unique challenges: capital scarcity, complex compliance in emerging sectors like Fintech and Agritech, and the "Scale-up Gap." This is precisely where the expertise of a Chartered Accountant becomes the ultimate growth lever.

The CA as a Strategic Growth Partner

In the modern startup world, the role of a CA has evolved from a "Tax Consultant" to a Strategic Navigator.

1. Beyond Compliance: The "Investor-Ready" Framework

Securing funding is the lifeblood of scaling. Investors are not just looking for a "great idea"; they are looking for Governance.

Valuation & Dilution: CAs help founders navigate the complex math of Series A and B rounds, ensuring they don't over-dilute equity early in the journey.

Due Diligence Readiness: We act as the first line of defense, ensuring that when global VC firms audit the books, they find a clean, transparent, and compliant history.

2. Unlocking Government Incentives



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The Rajasthan Startup Policy offers lucrative grants—from viability gap funding to QRate-based incentives.

QRate Audits: CAs play a vital role in helping startups improve their "Product Readiness" scores, which directly impacts the quantum of government funding they can access.

New Policies: With the 2026 AI and AVGC-XR policies, CAs must now guide tech-founders through sector-specific tax holidays and employment subsidies.

3. Financial Engineering for Unit Economics

A startup moves toward "Unicorn" status only when its unit economics (LTV/CAC) make sense.

Burn Rate Management: We provide the analytical rigor to monitor runway, preventing the "sudden death" scenarios common in high-growth firms.

Tax Structuring: Leveraging Section **80-IAC** and other startup-specific benefits to maximize reinvestment capital.

The Road Ahead: A Call to the Fraternity

The success of home-grown giants like **CarDekho**, **Minimalist**, and **Finova Capital** proves that Rajasthan-bred companies can compete globally. As members of the ICAI Jaipur Branch, we have a unique responsibility: **Be Mentors, Not Just Auditors:** Engage with the Atal Innovation Studios and local incubators to provide pro-bono financial literacy to early-stage founders.

Adopt Tech: To serve tech-startups, we must use tech. Embracing AI-driven auditing and real-time financial dashboards is no longer optional.

Bridge the Capital Gap: Connect traditional Rajasthani HNI investors and family offices with the new-age tech ecosystem, fostering local wealth creation.

The Path Forward: Auditing the Future

The journey from "Pink City" to "Unicorn City" is paved with data, discipline, and diligence. As Rajasthan's startups aim for the stars, let us ensure their feet are firmly planted on a bedrock of sound financial health. Together, we are not just auditing the present; we are auditing the future of Rajasthan's economy.

ACTIVITIES BY JAIPUR BRANCH

ALL INDIA EXCELLENCE CONFERENCE OF CA STUDENTS — “निर्मिताणः CREATING EXCELLENCE, SHAPING FUTURES”



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ALL INDIA EXCELLENCE CONFERENCE OF CA STUDENTS — “निर्मिताणः CREATING EXCELLENCE, SHAPING FUTURES”



Date : 4.11.2025, 5.11.2025

Speakers : Mr. Deepak Vohra, Former Ambassador of Poland, CA. Sanwormal Harshawal (MD – Harshawal Consulting LLP), along with CCM CA. Chandrashekhar Vasant Chitale, CCM CA. Pankaj Shah. Student presenters, Mr. Eashan, Ms. Mudrika Jain, Mr. Krish Sonkhiya, Ms. Pragnya Mohan, Indian Triathlete and Eklavya Awardee, CA. Bhanwar Borana, CCM CA. Rajesh Sharma, CA. Sakchi Jain, CA. Mayank Kataria, CA. Surender Mittal, CCM CA. Arpit Kabra, CA. (Dr.) Rohit Ruwatia Agarwal (Chairman, BOS-O, ICAI), CA. Sanjib Sanghi (Vice-Chairman, BOS-O, ICAI), CA. Hansraj Chug (Chairman, BOS-A, ICAI), CA. Purushottam Khandelwal (Vice-Chairman, BOS-A, ICAI), CA. Charanjot Singh Nanda, President, ICAI, CA. Prasanna Kumar D, Vice-President, ICAI, CA. Anuj Goyal, CA. Durgesh Kabra, and CA. Rajendra Kumar P., IRS (CA.) Mohit Garg, CA. Ankur Kumar Gupta (Chairman, CIRC), CA. Kuldeep Sharma (MCM, Jaipur Branch), Mr. Ajay Data, CA (Adv.) Sanjay Jhanwar, CA. Yashwant Mangal, CA. Manoj Gupta, CA. Ravi Sonkhia, CA. Amit Samriya, and CA. Ashutosh Lata

ACTIVITIES BY JAIPUR BRANCH

SEMINAR ON CODE OF ETHICS



Date : 10.11.2025

Speakers : Adv. Vijay Jhalani and CA. Vimal Chopra

ACTIVITIES BY JAIPUR BRANCH

NATIONAL TALENT SEARCH



Date : 26.11.2025

ACTIVITIES BY JAIPUR BRANCH

AI AURA WORKSHOP



Date : 29.11.2025 & 30.11.2025

ACTIVITIES BY JAIPUR BRANCH

FELICITATION NIRMIMAN



Date : 30.11.2025

BRANCH HELP DESK

Administrative Work
Members and Students related query
Students CICASA matters
Query related to OC
Query related to GMCS
Query related to IT / Adv. ITT
Query related Members benefits

Mr. Vishal Gupta	9672023888
Mr. Gopal Lal Gurjar	9667555211
Mr. Shiv Singh Chauhan	9672000551
Ms. Garima Rastogi	9672041119
Mr. Naresh Meena	9672000552
Mr. Anil Kumar Sharma	9667555216
Mr. Vishal Banjara	9667555213

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