

Part 3: Role of CMA in Carbon markets.

Dr.V.V.L.N. Sastry

Jurist & Financial Economist

***M.E, M.B.A, FCMA (CIMA), CMA, CGMA,
CPA, CACA, MSc (Economic Policy), LL.M, Ph.D.***

Post Doctorate in Economics.



Commitments of CMAs

Carbon neutral: The organizations offset their carbon emissions by purchasing rights or certificates that reflect renewable energy production or other global systems (such as forestation) to offset the release of carbon into the atmosphere.

Net-zero carbon: The organizations have to reduce their carbon emissions to align with 1.5°C science-based targets. The organization have accomplished this through direct abatement to the largest extent possible and neutralization of remaining atmospheric GHG emissions through CO₂ removal.

Carbon negative: The organizations have instituted activities that not only eliminate all carbon emissions but actually reduce the amount in the atmosphere through recapture. This goes past the balance of a net-zero goal and means that the organization removes more carbon from the atmosphere than it emits.

Climate neutral: The organizations offset all of its GHG emissions (CO₂ and other GHGs) by purchasing rights or certificates that reflect renewable energy production or other global systems (such as forestation) to offset the release of carbon into the atmosphere.

Drivers and practices that empower CMAs

From Commitments, the birth of drivers

Drivers

- 1. Introduction: Prepare Indian Economy and also Preparing for an Economy in which GHG Emissions Carry a Cost**
- 2. Organizational Considerations in Initiating a Decarbonization Plan**

Practices

- 1. Creating a GHG Assessment for Decision Making**
- 2. Estimating the Cost of Emissions**
- 3. Decarbonization Actions**
- 4. Strategies for Meeting Targets**
- 5. Sustainability and Climate Disclosure Guidelines**

Overall Role of CMA

Management accountants can deliver enormous value in reducing a company's carbon footprint by applying their competencies and skills in areas such as:

- 1) Strategic planning,
- 2) Financial analysis,
- 3) Risk management,
- 4) Internal controls and reporting,
- 5) Technology solutions,
- 6) Activity analysis,
- 7) Capital budgeting,
- 8) and Investor relations.

Role of CMA - Prepare Indian Economy and also Preparation for an Economy in which GHG Emissions Carry a Cost

Organizational Considerations for Decarbonizing

- Today, governments and the private sector are confronting climate change with increasing urgency. As the world considers the costs of the status quo, the onus will fall increasingly on organizations to respond by measuring their GHG emissions, estimating the costs vs. establishing new strategies, and finding low- or zero-emission alternatives, even if only to respond to competitive business pressures. But CMAs involved in sustainability highlight new opportunities over the short, intermediate, and long term that come from managing risks and taking advantage of opportunities as the economy transitions.
- Risk management (an internal driver): Estimating the Cost of Emissions, the threat of new regulatory constraints and limits on carbon emissions, such as through carbon taxes and emissions trading markets, forces organizations to become innovative to avoid these costs. These business responses, however, affect organizations of all sizes as they anticipate and act to respond to market effects of these regulatory changes. For example, given the announcement by major vehicle manufacturers to produce electric vehicles, downstream fossil-fuel distributors who fail to modify their business models may sustain asset impairment. In short, mitigating transition risks calls for adjusting strategies.
- Resilience, efficiencies, and opportunities (an internal driver): Bringing an organization's attention to its GHG emissions footprint is considered an essential first step in assessing its risks, particularly with respect to transition risks. A corporate assessment and decarbonization initiative, therefore, is an investment in corporate resilience and a process by which organizations can begin to not only mitigate their risks but also move forward on new opportunities, including cost-saving operational efficiencies. Conducting a GHG emissions assessment by itself can reveal valuable new insights that were not previously considered regarding the use of resources such as energy, water, materials, and human talent. It can initiate steps toward reducing waste.

In sum, enabling efficiency simultaneously helps decarbonize and save other valuable resources.

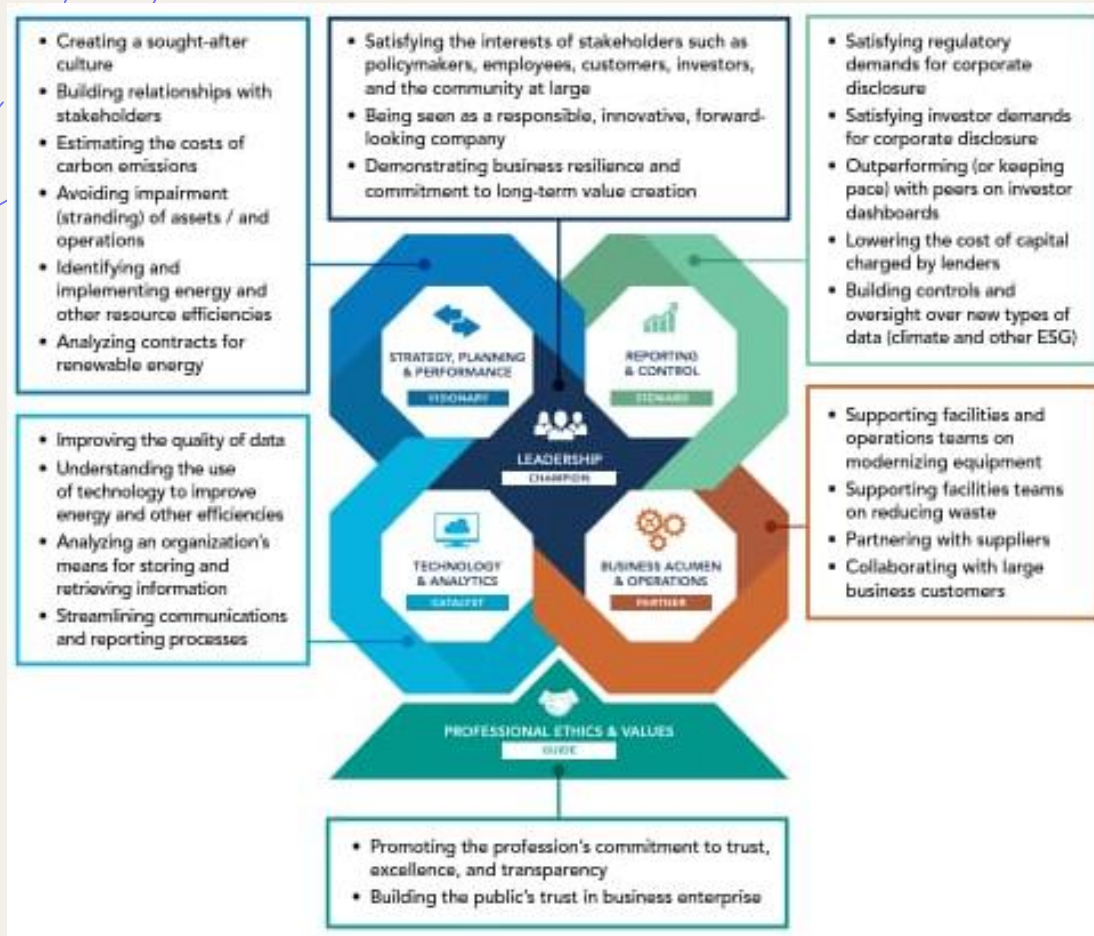
Role of CMA - Prepare Indian Economy and also Preparation for an Economy in which GHG Emissions Carry a Cost

- **Cost benefit carbon-reduction (an internal driver):** Companies are assessing the cost benefit of carbon-reduction initiatives and viewing them as long-term investments. For example, Delta Air Lines announced a plan to invest \$1 billion over 10 years for a series of actions toward becoming a carbon-neutral carrier. Many of these actions relate to physical assets, such as retiring and replacing older aircraft, improving flight operations, decreasing the use of fuel, and reducing cargo. Delta's plan also includes enhanced stakeholder engagement, which brings value to the organization's processes.
- **Creating and preserving intangible value (an internal driver):** Measuring and reducing a company's carbon footprint by seeking low- or zero-emission alternatives represent a financial hedge against the impairment of valuable assets and operations as the market continues to reward investments that are less fossil fuel-dependent. It facilitates the preservation and building of trust-based relationships with stakeholders, including policy makers, which can translate into more secure, long-term cash flow expectations. Following a business-as-in-the-past scenario, companies will be increasingly exposed not only to the physical disruptions of climate change but also to the costs of emissions.
- **Customer Demand (An external driver):** For example, corporate buyers representing \$4.3 trillion in annual procurement spend in 2020 requested climate-related data regarding their suppliers from CDP (formerly the Carbon Disclosure Project, which houses the largest global database for company-reported GHG emissions). Globally, consumers (particularly Millennials and younger market segments) are willing to pay more for sustainable brands.
- **Investor demands and disclosure standards (An external driver):** The growing pressure for disclosure of environmental, social, and governance (ESG) data to satisfy the demands of the financial markets, including shareholders, leading to lenders, insurers, rating agencies, and financial regulators insist the largest institutional investors, such as BlackRock, Vanguard, and State Street, along with government employee pension funds around the world, pushing companies to measure and report on ESG.

Role of CMA - Prepare Indian Economy and also Preparation for an Economy in which GHG Emissions Carry a Cost

- Peer pressure (An external driver): As environmental data becomes increasingly pivotal in investment decision making, companies are concerned about the effects of a poor ESG rating in comparison to their peers. An overwhelming number of studies examining the link between sustainability and financial performance have concluded that good ESG practices effectively lower the cost of capital. The research demonstrates that investors view ESG ratings as an indication that management is paying attention to the most relevant risks within their businesses and responding with agility to deliver on changing stakeholder expectations.
- Professional ethics -Professional accountancy (An external driver): Governments, non-profits, and businesses large and small can't run without professional accountants. This puts the profession in a powerful position to influence all organizations' approach to climate action. And for all organizations seeking to act, effective action will require the trust and expertise that professional accountants bring to the table. To stay relevant in the new paradigm, professional accountants must apply their competencies to meet the demand for actionable assessments.

CMAA Competencies in Addressing an Organization's Carbon Footprint



CMAA competencies

- CMAAs play a crucial role in companies addressing sustainable business management and ESG reporting. ESG reporting sits outside of the finance and accounting function of CAs.
- They gather reliable data, evaluate alternatives, and make recommendations aligned with an organization's purpose, values, business model, strategic initiatives, and risk management. They provide robust oversight to data gathering and analysis processes, leading information-based decision-making across the enterprise.
- CMAAs have the competencies to meet regulatory and market demands, build processes, analyze projects, and implement capital budgets for long-term investments in plant and equipment.

Practices of CMAs - Creating a GHG Assessment for Decision Making

As a part of creating a CHG assessment:

- 1) Identify Activities
- 2) Measure Estimates

To prepare for low or carbon-neutral operations, businesses, with the leadership of their CMA teams, enterprises can perform a reliable GHG inventory that connects with the organization's business model and strategic planning.

The assessment includes:

- 1) identifying activities that produce GHG,
- 2) sourcing emissions factors,
- 3) setting boundaries and scope,
- 4) and gathering reliable data for analysis.



Practices of CMAs - Estimating the Cost of Emissions



As a part of estimating the cost of emissions:

Led by its management accountants and for purposes of internal assessments, an organization may utilize different means to operationalize how authorities and the market may impose costs on emissions.

An organization, for example, may consider the following techniques.

- **Internal carbon fee system:** The goal of an internal carbon fee is to identify the operational units that are most responsible for the organization's overall emissions and to incentivize reductions. To do so, the organization charges business units internally for their respective shares of the costs of carbon emissions. The aggregated amounts are then awarded internally to projects for emissions reduction or other sustainable business initiatives.
- **Shadow price:** The organization estimates a price for decision making; evaluating the recoverability of GHG-intensive investments, assets, and operations; and evaluating alternatives. A shadow price is based on various assumptions; no actual transfer of funds occurs. Instead, the price on carbon is used to assist in evaluating an investment decision.
- **An implicit price:** This cost factor is based on how much a company spends in complying with government regulations such as new fuel efficiency standards. Given the number and varied nature of these programs, it is beneficial for management accountants to collaborate with other corporate professionals, such as members of the legal, public policy, sustainability, and operations teams.

The above is an example.

- + Regardless of the current trading prices (spot rate), in order to assess current and planned investments in a range of assets and operations, it is beneficial for management accountants to consider price trends and expectations. In aiming to counter the physical damage from climate change, authorities and market forces will continue to drive the cost of emissions, and management accountants will be developing sound analyses for risk management, innovation, and strategic plans that result in performance and value over the short, medium, and long term.

Practices of CMAs - Meeting Targeted Reductions

Setting GHG emission goals and tracking progress:

There are various actions a company can take to reduce or eliminate its emissions, referred to by the term “decarbonize.” These include the following:

- + Improving operational efficiencies through projects that reduce the amount of energy used.
- Reducing GHG emissions by changing the type of energy used.
- Purchasing offsets to alleviate the environmental effects.
- Working with suppliers to reduce the GHG emissions of inputs.
- Addressing the GHG emissions inherent in how business customers and consumers use a product.

Establishing a Baseline Assessment:

In initiating its assessment process, an organization establishes a baseline. This initial measurement serves as a means for setting realistic targets and measuring progress over subsequent periods. As the organization implements initiatives, management can track progress, reassess its strategy, and plan subsequent steps, such as new projects or tactics to reduce additional sources of emissions. In some instances, the management accountant uses judgment to consider adjustments to normalize the baseline year.

Target Setting

GHG emissions targets vary based on sector and industry, geography, and competition. Targets are also based on management commitment and the veracity and thoroughness of an initial baseline assessment and subsequent updates. For example, certain energy-intensive industries such as construction, oil and gas, and mineral extraction rely heavily on science-based data to set targets for reducing GHG emissions.

Types of Targets

Establishing emission targets requires strategic thinking. There are different kinds of emissions targets that call for different types of measurement and activity. Absolute target: A target that aims to reduce emissions by a fixed percentage or amount. Example: Company A plans to reduce emissions by 25% by 2030.

Intensity target: A target that aims to reduce emissions relative to a type of economic output such as revenue, number of employees, or square feet. Example: Company B plans to reduce Scope 1 emissions by 20% per square foot.



Practices of CMAs - Meeting Targeted Reductions



Setting Targets by Time Frame:

Most sustainable business initiatives are developed to meet targets over the intermediate and long term. The timing of targeted reductions must align with an organization's overall strategic planning and its goals of acting responsively to stakeholder expectations.

Working in tandem, the United Nations and national governments express global and national emissions reduction targets in terms of target date, such as 2025, 2030, and 2050. Similarly, organizations that are incorporating carbon pricing and GHG emissions reductions into their business strategies typically express reductions in terms of a target year.

Using External Resources

In setting targets, the management accountant, partnering with key members of other business units, can refer to both the internal assessment as well as external sources of information.

Resources are basically: Science-based resources, Comparables, Government-set targets.

Practices of CMAs - Reporting to external stakeholders



The movement toward more regulatory-based reporting, particularly regarding transition risks, is a response, in part, from a hodgepodge of fragmented, voluntary reporting standards.

Standards from Institutes have to come forward in terms of Sustainability and Climate Disclosure Guidelines, Collaborating with Both Upstream and Downstream Partners in the Supply Chain, Creating a GHG Assessment for Decision Making, Investing in Global Carbon Reductions by Sourcing Offsets, Financial Reporting of Various Arrangements are critical areas for CMAs.

Currently, many companies release their ESG information directly to the public. Other data are submitted pursuant to regular surveys, such as CDP's, and commercial rating companies, such as Sustainalytics and RobecoSAM.

Many practitioners foresee a growing demand for assurance of the accuracy of publicly reported emissions information.

Today, organizations in some industries already obtain assurance for emissions information that is largely produced for government reports. Regardless of the reporting standards that an organization uses to report on its emissions, it will be critical that the organization institute accounting systems with effective controls and oversight to ensure data quality, reliability, and representational faithfulness.

This requires the expertise and skills of management accounting teams to develop, implement, and oversee the control environment and help enhance confidence in emissions assessments. This builds system-wide trust in the profession and represents the foundation of meaningful action.

Summary of CMAs role in Carbon Markets

Management accountants play a crucial role in helping organizations reduce their carbon footprint by providing financial and strategic insights that drive sustainability initiatives. Here are several ways in which management accountants contribute to this important goal:

- **Cost Analysis and Reduction:** Management accountants can analyze the costs associated with various processes, products, or activities within the organization. By identifying areas where carbon emissions are high and costs are excessive, they can recommend changes to reduce both. This may include the adoption of more energy-efficient technologies, the optimization of supply chains, or the elimination of wasteful practices.
- **Budgeting for Sustainability Initiatives:** Management accountants can help create budgets and financial plans specifically for sustainability projects. They can evaluate the return on investment (ROI) for green initiatives, enabling the organization to allocate resources effectively.
- **Carbon Accounting:** Management accountants can establish and maintain systems for tracking and reporting greenhouse gas emissions. This data is essential for assessing an organization's carbon footprint and for meeting regulatory reporting requirements.

Summary of CMAs role in Carbon Markets

(Continued from last slide)

- **Performance Metrics:** They can develop key performance indicators (KPIs) related to environmental impact and sustainability. These metrics allow organizations to monitor their progress, set targets, and align their actions with their sustainability goals.
- **Lifecycle Analysis:** Management accountants can perform lifecycle assessments of products or services. This involves considering the environmental impact from the extraction of raw materials to production, transportation, and eventual disposal. This analysis can help identify opportunities for reducing the carbon footprint throughout a product's lifecycle.
- **Tax Incentives and Credits:** They can identify and maximize tax incentives and credits related to sustainable practices. These financial incentives can help offset the costs of green initiatives.
- **Scenario Analysis:** Management accountants can use financial modeling and scenario analysis to evaluate the impact of different sustainability strategies. This helps organizations make informed decisions about which initiatives to pursue.

Summary of CMAs role in Carbon Markets

(Continued from last slide)

- **Sustainability Reporting:** Management accountants can assist in the preparation of sustainability reports, which are increasingly important for transparency and stakeholder engagement. These reports communicate an organization's environmental performance and goals to investors, customers, and the public.
- **Compliance and Risk Management:** They can ensure that the organization complies with environmental regulations and helps manage potential risks associated with non-compliance or changing environmental regulations.
- **Supply Chain Management:** By analyzing the environmental impact of the supply chain, management accountants can help the organization make informed decisions about suppliers, transportation methods, and inventory management, which can reduce the carbon footprint.
- **Investment Analysis:** Management accountants can assess the financial viability of green investments, such as renewable energy projects or energy-efficient technologies, to determine their long-term impact on the organization's sustainability and profitability.
- **Employee Engagement:** They can work with HR and management to develop incentives and strategies for engaging employees in sustainability efforts, as employees play a crucial role in implementing green initiatives.

In summary, management accountants can provide the financial expertise and analysis needed to make sustainable choices and reduce an organization's carbon footprint. Their role extends beyond traditional financial management and includes a focus on environmental stewardship and responsible business practices



End of Part-III

Thanks for your patient listening

Now the floor is left for Q&A

