



TECHNICAL INSIGHTS

SUPPLY CHAIN NET ZERO

JUNE 2022

Greenhouse gas emissions, primarily from the combustion of fossil fuels, have risen dramatically since the start of the industrial revolution, resulting in rising global temperatures. Our Government has also called on organisations and individuals to tackle the issue of global warming. Despite the increasing number of large organisations making emissions commitments, addressing Scope 3 of the Greenhouse Gas Protocol - The Corporate Value Chain Standard remains a huge challenge for them. nevertheless, delivering on Scope 3 is fundamental for organisations to realise credible climate change commitment. New actions to combat climate change are needed that rests on supporting small and medium enterprises and transitioning entire supply chains. Many large organisations are expected to commence their efforts and strategies in maintaining their edge in the market, including taking steps to reduce carbon emissions through various initiatives and approaches. It is important that organisations engage with their supply chain partners and work with them collectively to reduce their greenhouse gas emissions.

The World Economic Forum and Boston Consulting Group in 2021 reported that eight supply chains, i.e., food, construction, fashion, fastmoving consumer goods, electronics, automotive, professional services and freight, account for more than half, i.e., more than 50% of all global greenhouse gas emissions. In view of the significant contribution of greenhouse gas emissions by supply chains, one way that organisations can deal with their carbon footprint issues is to decarbonise their supply chains. Organisations are encouraged to take action to address the elephant in the room by tackling their supply chains to achieve sustainable goals. It is undoubted that supply chains have the greatest room to help organisations achieve their sustainable goals.

Organisations can make a difference by controlling and managing carbon emissions in their supply chains. One way is to gather information and establish a value chain emissions baseline, i.e., measurable data to understand the carbon footprint patterns of their supply chains. Such measurable data will help organisations gain better understanding of the full extent of carbon emissions in their supply chains. Organisations may use such measurable data for more productive means, such as identifying risks and opportunities for purposes of improvement. Organisations can also utilise the data to provide their supply chains with targets and incentives. In addition, disclosing the carbon emissions of their supply chains to the public can help consumers understand the environmental impact behind their purchasing decisions.

In Malaysia, Bursa Malaysia Berhad has recently proposed amendments to its Listing Requirements, aimed at enhancing disclosures on sustainability material matters and indicators for listed issuers across all sectors. Such proposals include alignment with climate change

related disclosures recommended by the Task Force on Climate Related Financial Disclosures Recommendations for listed issuers. This alignment will help investors and consumers understand the environmental impact of their investment and purchasing decisions.

In addition, the use of renewable energy to drive supply chain innovation is also crucial to organisations. Renewable energy refers to the earth’s natural energy that is not exhaustible, such as wind and sunlight. This energy can be an alternative to fossil fuels, such as coal, oil and gas and is less harmful to the environment. Organisations can make a change and an impact to the environment by choosing a green energy solution, i.e., opt for renewable energy instead of the use of traditional energy such as coal, oil, and gas. Renewable energy can also be deployed throughout the supply chain to manage and mitigate risk, reduce costs, drive revenue, and enhance branding. Organisations should evaluate their energy procurement strategy to enjoy the benefits of using renewable energy. Organisations may choose to procure onsite or offsite renewable energy. For offsite renewable energy, it can be procured through entering into power purchase agreements, typically 15- to 20- year contracts, if available, which offer clean electricity for a fixed price. The change from payment of monthly electricity bills to long-term energy contracts moves electricity bills from an overhead cost to a direct material input, producing a positive impact on cost structure.

To address supply chain net zero, organisations need to deal with many aspects of their supply chains. According to the World Economic Forum and the Boston Consulting Group, there are nine areas that can enable organisations to tackle carbon emissions in their supply chains:



Corporate Guide for Decarbonising Supply Chains

To summarise the World Economic Forum and Boston Consulting Group’s recommendations for decarbonising supply chains:

Action #1: Build a value-chain emissions baseline and exchange data with suppliers

It is important for an organisation to establish a comprehensive emissions baseline. Supply chain greenhouse gas emissions can be calculated with different levels of granularity. As an initial step, organisations can match their procurement spending to global carbon emission factors databases. In the second step, accuracy can be improved through using a volume-based approach or by using a regional view, for example, segmenting suppliers by location and making specific estimates based on the regions in which suppliers operate.

Action #2: Set ambitious reduction target on scopes 1–3 and publicly report progress

Once they have information on their supply chain carbon emissions, organisations are encouraged to set a target across all emissions scopes and understand what this means for their business. Where there are no widely accepted target pathways, organisations can consider developing target pathways with others in their sector or industry.

Action #3: Redesign products for sustainability

The choice of materials can help organisations reduce their supply chain carbon emissions. In many industries, organisations need to differentiate between in-series products and products in development. For in-series products, organisations may not easily make changes them, but they can try to lower the energy footprint in suppliers' operations and increase the share of recycled input materials. For products in development, organisations can design products for sustainability using greener materials.

Action #4: Design value chain/sourcing strategy for sustainability

Organisations should also consider carbon emissions in their value chain design choices, for example, by rethinking their make-or-buy decisions and by limiting the need for long range logistics.

Action #5: Integrate emissions metrics in procurement standards and track performance

Setting procurement standards for suppliers is one of the most powerful direct levers to address upstream carbon emissions. Strong standards link practices, such as a specific share and quality of renewable power, required levels of process efficiency or a required share of recycled materials, to procurement decisions.

Action #6: Work with suppliers to address their emissions

In many cases, reducing upstream carbon emissions will require working directly with suppliers on joint abatement and circularity projects.

Action #7: Engage in sector initiatives for best practices, certification, traceability, policy advocacy

Sector initiatives are another way for organisations to increase their impact. This is especially relevant for players in sectors reliant on capital-intensive decarbonisation solutions that would be prohibitively expensive for a single organisation. Organisations should therefore put

pressure on industry bodies to establish sector-level targets for climate action. In doing so, they can move the entire sector and their supply chains and allay concerns regarding competitiveness.

Action #8: Scale-up “buying groups” to amplify demand-side commitments

Demand side commitments can also be a tool to encourage investments in decarbonisation technologies. Organisations are also joining forces with supply chain partners and with a broader ecosystem of regulators and policymakers to create markets for green solutions and sign offtake agreements to make green solutions more economical.

Action #9: Introduce low carbon governance to align internal incentives and empower your organisation

Organisations that embark on the journey of decarbonising their supply chains need to change the way they operate. They require more comprehensive data exchange with suppliers, including engaging them on their carbon emissions, integrating carbon emissions into procurement standards and decisions, and aligning targets and incentives in their organisation to emission reduction targets. All of this requires governance.

(Source: Net-Zero Challenge: The supply chain opportunity, January 2021, The World Economic Forum, and the Bosting Consulting Group)

Role of Professional accountants in Dealing with Decarbonising Supply Chains

With a newfound pressure around the demands to disclose an organisation’s climate change risks and opportunities, professional accountants as trusted advisors to organisations they work with and for, are also expected to be cognisant of climate-related risks and net zero emissions, including supply chain net zero of organisations, consider cost-benefit perspectives, assess its implications to the finance function of organisations, and advise employers diligently. In short, professional accountants and finance functions play a role in navigating the way to achieve the organisational net zero emissions targets, including:

- raising and allocating funds needed for adaptation;
- providing information and data to drive the reduction of carbon dioxide emissions agenda;
- embedding the reduction of carbon dioxide emissions in the decision-making process;
- devising strategies to achieve the committed targets;
- interacting with capital markets to meet the committed targets;
- ensuring compliance with regulatory requirements; and
- reporting performance against the committed targets.

As part of MICPA’s efforts to prepare members in dealing with climate change risk and net zero emissions including supply chain net zero, we hope that this article will be able to assist you to commence your efforts to tackle these head-on. The ultimate aim is to prevent a worsening climate crisis and seize opportunities in the energy transition.

(Note: This publication was also included in the Institute’s magazine ‘The Malaysian Accountant Journal’ May / June 2022 Issue)