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Interview of Mr. Swapn Malpani- Joint President and Global Head Supply Chain – Cipla



Special Issue on Sustainable Procurement



Seminar on Emerging Trends in Public Procurement 28th May, 2022, Hotel The Park, New Delhi



Lighting of Lamp by Chief Guest Shri Ram Prakash, Additional Member, Railway Board. Other dignitaries from L to R: Shri J.S. Prakash Rao-Sr. VP-IIMM, Shri T.G. Nand Kumar-Co-Chairman- BOS- IIMM, Shri G.K. Singh-Former President- IIMM, Shri Rohit Saxena, Director-PWC, Shri H.K. Sharma- National President – IIMM, Shri Sanjay Shukla- Chairman-Delhi Branch, Shri Ajeet Kumar-VP North-IIMM and Shri Kameshwar Choudhary - Former COS, Northern Railway



Audience attending Seminar



Releasing a Booklet on “Emerging Trends in Public Procurement”.



Dignitaries of the Seminar held by IIMM Delhi Branch



Participants singing Vande Mataram

From the Desk of Chief Editor & National President



Every organization has environmental, social and economic impacts.

Procurement is a powerful instrument for organizations wishing to behave in a responsible way and contribute to sustainable development and to the achievement of the United Nations Sustainable Development Goals. By integrating sustainability in procurement policies and practices, including supply chains, organizations can manage risks (including opportunities) for sustainable environmental, social and economic development.

Sustainable procurement represents an opportunity to provide more value to the organization by improving productivity, assessing value and performance, enabling communication between purchasers, suppliers and all stakeholders, and by encouraging innovation.

Sustainable Public Procurement (SPP) roots its genesis from United Nations Environment Program (UNEP – 2015) under Sustainable Development Goal 12 (SDG12) as “Promote public procurement practices that are sustainable, in accordance with national policies and priorities” and can be defined as a “process whereby public sector meets its needs for **goods, services, works and utilities** in a way that achieves value for money on a whole life-cycle basis in terms of generating benefits not only to the organization, but also to society, whilst significantly **reducing negative impacts** on the environment”.

SPP has transformed the virtue of Public Procurement from efficient, effective & transparent procurement system to efficient, effective, transparent, ecological and socio-economic procurement system. It has emerged as the powerful strategic instrument to achieve national public procurement policy objectives besides reaping economic, social and environmental benefits. This takes into consideration sustainability criteria at each stage of procurement. Ranking of products or services is eventually based on a holistic combination of environmental attributes, quality, and cost. Governments across the world are leveraging their scale of procurement to fast-track adoption of sustainable goods and services. Procuring environment friendly products and services not only reduces waste and water consumption but also limits energy and carbon emissions. It supports fair and sustainable economic growth and delivers social benefits through procurement.

Integration of Sustainable Public procurement concepts will help us in reducing the Carbon footprints (India has set its target of Carbon Neutrality by 2070) to meet the target of carbon emission neutrality by 2070. India is in the forefront of promoting sustainable procurement. Present chairmanship of international solar alliance with India will help significantly in this direction.

Starting with this issue of MMR, I shall be bringing entire features of ISO:20400 on Sustainable Procurement to you in Instalments. However, it is advisable that procurement professionals read the complete standard thoroughly and make a serious effort towards its implementation in their respective industries.

Remember, what Mahatma Gandhi Said “Earth provides enough to **satisfy every man’s needs, but not every man’s greed.**”

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CONTENTS

PAGE NO.

■ ISO 20400:2017 (E) SUSTAINABLE PROCUREMENT - INTRODUCTION, TERMS & DEFINITION	5
■ PROCUREMENT TRAILBLAZER MANAGING RESILIENCE IN PHARMA SUPPLY CHAIN	9
■ MOVING TOWARDS SUSTAINABLE SUPPLY CHAIN	12
■ SUSTAINABLE PROCUREMENT POLICY GUIDELINES	16
■ SUSTAINABLE SUPPLY CHAIN AND RESPONSIBLE SOURCING	21
■ CLIMATE POSITIVE SUPPLY CHAINS - A SIMPLE APPROACH TOWARDS SUSTAINABLE BUSINESSES	24
■ OPPORTUNITIES FOR RESOURCE EFFICIENT CLEANER PRODUCTION (RECP) FOR METAL PRODUCTS SUPPLY CHAIN IN THE BUILDINGS AND CONSTRUCTION SECTOR: LESSONS FROM SOUTH ASIA	26
■ AS SUSTAINABILITY REPORTING KICKS IN, ESG INVESTING FACES GLOBAL CREDIBILITY RISK	29
■ SUSTAINABILITY QUIZ	31
■ 5 KEY FACTORS WHEN CHOOSING SUPPLIER SUSTAINABILITY MONITORING SOLUTION	32
■ CONNECTED LOGISTICS IN SHIPPING: NEED OF THE HOUR	34
■ INDIA SHOULD FOCUS ON GREEN PROCUREMENT STRATEGY: SUDHIR ZUTSHI	35
■ INFORMATION TECHNOLOGY LEADING PATH OF INDIAN MSMEs TO MARCH AS CHAMPIONS	37
■ IS 2022 THE YEAR WHEN INDIAN BRANDS WILL GET MORE SERIOUS ABOUT SUSTAINABILITY?	38
■ NEW PRODUCT CATEGORY OF GREEN ROOM AIR CONDITIONERS LAUNCHED ON GOVERNMENT E-MARKETPLACE (GEM) TO MARK THE WORLD ENVIRONMENT DAY	41
■ PROCUREMENT IS MISSING IN SUPPLY CHAIN SUSTAINABILITY	42
■ SUSTAINABLE PROCUREMENT MAKES GOOD BUSINESS SENSE	45
■ THE EVIDENCE IS CLEAR: THE TIME FOR ACTION IS NOW. WE CAN HALVE EMISSIONS BY 2030.	46
■ CPO DIALOGUE 22 APRIL 2022 AT HOTEL LE MERIDIAN JANPATH, NEW DELHI	49
■ BRANCH NEWS	50

NO. OF PAGES 1-60

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ISO 20400:2017 (E)

SUSTAINABLE PROCUREMENT

- INTRODUCTION TERMS & DEFINITION

Introduction : Every organization has environmental, social and economic impacts. Procurement is a powerful instrument for organizations wishing to behave in a responsible way and contribute to sustainable development and to the achievement of the United Nations Sustainable Development Goals. By integrating sustainability in procurement policies and practices, including supply chains, organizations can manage risks (including opportunities) for sustainable environmental, social and economic development.

Sustainable procurement represents an opportunity to provide more value to the organization by improving productivity, assessing value and performance, enabling communication between purchasers, suppliers and all stakeholders, and by encouraging innovation.

This document assists organizations in meeting their sustainability responsibilities by providing an understanding of:

- what sustainable procurement is;
- what the sustainability impacts and considerations are across the different aspects of procurement activity:
 - policy;
 - strategy;
 - organization;
 - process;
- how to implement sustainable procurement.

Figure 1 presents the structure of this document.

This document is applicable to any organization, public or private, regardless of its size and location. It is intended to be understood by any stakeholder involved in, or impacted by, procurement decisions and processes. The implementation of this document takes into account the particular context and characteristics of each organization, scaling the application of the concepts to suit the size of the organization. The adoption of this document by large organizations promotes opportunities for small and medium-sized organizations in their supply chains.

Clause 4 provides an overview of sustainable procurement. It describes the principles and core subjects of sustainable procurement and examines why organizations undertake sustainable procurement. Important consideration is given to managing risks (including opportunities), addressing adverse sustainability impacts through due diligence, setting priorities, exercising positive influence and avoiding complicity.

Clause 5 provides guidance on how sustainability considerations are integrated at a strategic level within the procurement practices of an organization, to ensure that the intention, direction and key sustainability priorities of the organization are achieved. It is intended to assist top management in defining a sustainable procurement policy and strategy.

Clause 6 describes the organizational conditions and management techniques needed to successfully implement and continually improve sustainable procurement. The organization ensures that such conditions and practices are in place in order to assist individuals with responsibility for the procurement of goods or services integrate sustainability considerations into the procurement process.

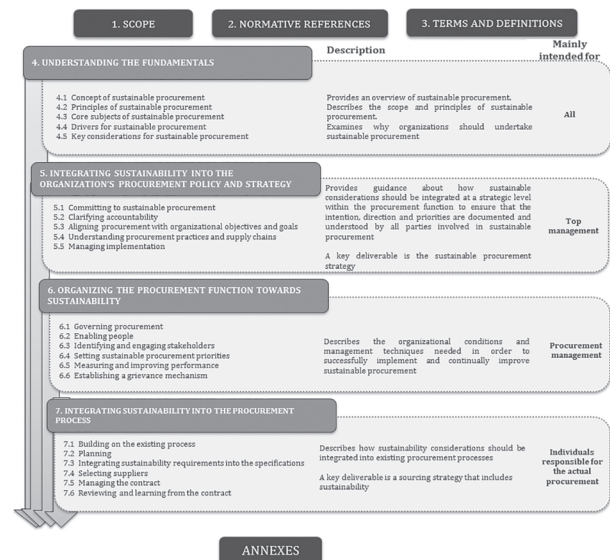


Figure 1 – Schematic View of the Content of ISO 20400

Clause 7 addresses the procurement process and is intended for individuals who are responsible for the actual procurement within their organization. It is also of interest to those in associated functions, as it describes how sustainability considerations are integrated into existing procurement processes.

Sustainable Procurement – Guidance

1. Scope : This document provides guidance to organizations, independent of their activity or size, on integrating sustainability within procurement, as described in ISO 26000. It is intended for stakeholders involved in, or impacted by, procurement decisions and processes.

2. Normative references : There are no normative references in this document.

3. Terms and definitions : For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1 circular economy : economy that is restorative and regenerative by design, and which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles

[SOURCE: Adapted from Ellen MacArthur Foundation (24)]

3.2 decent work : work performed in conditions of freedom, equity, security and human dignity

[SOURCE: Adapted from ISO 26000:2010, 6.4.1.1, Box 8]

3.3 due diligence : process through which *organizations* (3.16) proactively identify, assess, prevent, mitigate and account for how they address their actual and potential adverse impacts as an integral part of decision-making and *risk management* (3.22)

3.4 environmental label: claim which indicates the environmental aspects of *goods* [3.7] or *services* [3.23]

Note 1 to entry: An environmental label or declaration may take the form of a statement, symbol or graphic on a product or package label, in product literature, in technical bulletins, in advertising or in publicity, amongst other things.

[SOURCE: ISO 14020:2000, 2.1, modified — The alternative term “environmental declaration” has been deleted, and the words “product or service” have been replaced by “goods or services” in the definition]

3.5 ethicalbehaviour : behaviour that is in accordance with accepted principles of right or good conduct in the context of a particular situation and is consistent with *international norms of behaviour*[3.9]

[SOURCE: ISO 26000:2010, 2.7]

3.6 fair operating practices : operating practices that concern ethical conduct in an *organization* (3.16) and with other organizations, such as *suppliers* [3.30], with which it has relationships

Note 1 to entry: In a *sustainable procurement* [3.38] context, fair operating practices can potentially extend to include the relationships between organizations,

their suppliers and organizations and others that interact with the suppliers. These include interactions with government agencies, partners, suppliers, sub-contractors, and communities, with the aim of promoting a healthy relationship between the companies that *buy goods* [3.7] or *services* [3.23] and those providing them.

[SOURCE: Adapted from ISO 26000:2010, 6.6]

3.7 goods : items or materials that, upon the placement of a purchase order, are being manufactured, processed, handled or transported within the *supply chain* [3.32] for usage or consumption by the *organization* [3.16]

[SOURCE: ISO 28001:2007, 3.11, modified — The word “purchaser” has been replaced by “organization”]

3.8 indicator : measurable representation of the condition or status of operations, management, or conditions

[SOURCE: ISO 14031:2013, 3.15]

3.9 international norms of behaviour : expectations of socially responsible organizational behaviour derived from customary international law, generally accepted principles of international law, or intergovernmental agreements that are universally or nearly universally recognized

Note 1 to entry: Intergovernmental agreements include treaties and conventions.

Note 2 to entry: Although customary international law, generally accepted principles of international law and intergovernmental agreements are directed primarily at states, they express goals and principles to which all *organizations* [3.16] can aspire.

Note 3 to entry: International norms of behaviour evolve over time.

[SOURCE: ISO 26000:2010, 2.11]

3.10 key performance indicator : KPI : indicator[3.8] of performance deemed by an *organization* [3.16] to be significant and giving prominence and attention to certain aspects

[SOURCE: ISO 14031:2013, 3.17]

3.11 : labour practices : practices relating to work performed within, by or on behalf of the *organization* (3.16), including subcontracted work

[SOURCE: Adapted from ISO 26000:2010, 6.4]

3.12 : life cycle : consecutive and interlinked stages of a *goods-* (3.7) or *services* [3.23] system, from raw material acquisition or generation from natural resources to final disposal

[SOURCE: ISO 14044:2006, 3.1, modified — The word “product” has been replaced by “goods or services”]

3.13 : life cycle approach : consideration of *life cycle* [3.12] in decision-making or development processes

3.14 : life cycle costing : LCC : method for calculating the costs of *goods* [3.7] or *services* [3.23] throughout their *life cycle* [3.12]

3.15 : objective : result to be achieved

[SOURCE: ISO 9000:2015, 3.7.1, modified — Notes to entry have been deleted]

3.16 organization : person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* [3.15]

Note 1 to entry: The concept of organization includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, association, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

[SOURCE: ISO 9000:2015, 3.2.1, modified — Note 2 to entry has been deleted]

3.17 : policy : intentions and direction of an *organization* [3.16] as formally expressed by its top management

[SOURCE: ISO 9000:2015, 3.5.8, modified — Note 1 to entry has been deleted]

3.18 : procurement : activity of acquiring *goods* [3.7] or *services* [3.23] from *suppliers* [3.30]

Note 1 to entry: The procurement process considers the whole cycle from identification of needs through to the end of a services contract or the end of the life of goods, including disposal.

Note 2 to entry: Sourcing is a part of the procurement process that includes planning, defining *specifications* [2*26] and selecting suppliers.

3.19 : requirement : provision that conveys criteria to be fulfilled by *goods* [3.7], *processes* or *services* [3.23]

[SOURCE: ISO/IEC Guide 2:2004, 7.5, modified — The words “goods, processes or services” have been added at the end of the definition]

3.20 : risk : effect of uncertainty on *objectives* [3.15]

Note 1 to entry: An effect is a deviation from the expected — positive and/or negative.

Note 2 to entry: Objectives include maximizing the contribution to *sustainable development* (3.37).

Note 3 to entry: Risk is often characterized by reference to potential events and consequences, or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event [including changes in circumstances] and the associated likelihood of occurrence.

Note 5 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.

[SOURCE: ISO Guide 73:2009, 1.1, modified — Note 2 to entry has been changed]

3.21 : risk assessment : overall process of *risk* [3.20] identification, risk analysis and risk evaluation

[SOURCE: ISO Guide 73:2009, 3.4.1]

3.22 : risk management : coordinated activities to direct and control an *organization* [3.16] with regard to *risk* [3.20]

[SOURCE: ISO Guide 73:2009, 2.1]

3.23 : service : results generated by activities at the interface between a *supplier* (3.30) and a customer and by supplier internal activities to meet customer needs

[SOURCE: ISO 5127:2001, 5.5.01]

3.24 : small and medium-sized organization SMO : *organization* [3.16] defined by a number of employees or size of financial activities that fall under certain thresholds, which vary from country to country

3.25 : social responsibility : responsibility of an *organization* [3.16] for the impacts of its decisions and activities on society and the environment, through transparent and *ethical behaviour* [3.5] that

- contributes to *sustainable development* [3.37], including health and the welfare of society;
- takes into account the expectations of *stakeholders* [3.28];
- is in compliance with applicable law and consistent with *international norms of behaviour* [3.9]; and
- is integrated throughout the organization and practised in its relationships

Note 1 to entry: Activities include *goods* (3.7), *services* (3.23) and processes.

Note 2 to entry: Relationships refer to an organization's activities within its *sphere of influence* (3.27).

[SOURCE: ISO 26000:2010, 2.18, modified — The word “products” has been replaced by “goods” in Note 1 to entry]

3.26 : specification : document stating *requirements* (3.19)

[SOURCE: ISO 9000:2015, 3.8.7, modified — Example and Notes to entry have been deleted]

3.27 : sphere of influence : range/extent of political, contractual, economic or other relationships through which an *organization* (3.16) has the ability to affect the decisions or activities of individuals or organizations

Note 1 to entry: The ability to influence does not, in itself, imply a responsibility to exercise influence.

Note 2 to entry: Leverage in the context of the UN Guiding Principles on Business and Human Rights is a specific form of influence considered to exist where an organization can effect change in the wrongful practices of an entity that causes harm.

[SOURCE: ISO 26000:2010, 2.19, modified — Note 2 to entry has been changed]

3.28 : stakeholder : individual or group that has an interest in any decision or activity of an *organization* (3.16)

[SOURCE: ISO 26000:2010, 2.20]

3.29 : subcontractor : *organization* (3.16) or individual contracted by the *supplier* (3.30) to perform a specific part of a contract

3.30 : supplier : *organization* (3.16) that provides *goods* (3.7) or *services* (3.23)

[SOURCE: ISO 9000:2015, 3.2.5, modified — The words “a product or a service” have been replaced by “goods or services”]

3.31 : local supplier : *supplier* (3.30) to the *organization* (3.16) that is based in the same geographic market

Note 1 to entry: The term “local” can refer to the surrounding community operations, to a region within a country, or a country.

3.32 : supply chain : sequence of activities or parties that provides *goods* (3.7) or *services* (3.23) to the *organization* (3.16)

[SOURCE: ISO 26000:2010, 2.22, modified — The word “products” has been replaced by “goods”]

3.33 : sustainability : state of the global system, including environmental, social and economic aspects, in which the needs of the present are met without compromising the ability of future generations to meet their own needs

Note 1 to entry: The environmental, social and economic aspects interact, are interdependent and are often referred to as the three dimensions of sustainability.

Note 2 to entry: Sustainability is the goal of *sustainable development* (3*370-[SOURCE: ISO Guide 82:2014, 3.1]

3.34 : sustainability aspect : aspect of an activity or *goods* (3.7) or *services* (3.23) that, during the *life cycle* (3.12) of the activity, or goods or services, is related to *sustainability* (3.33), positively or negatively

3.35 : sustainability claim : claim which indicates the *sustainability aspects* (3.34) of *goods* (3.7) or *services* (3.23)

Note 1 to entry: A claim can take the form of a label, declaration, statement, symbol or graphic on a product

or package label, in product literature, in technical bulletins, in advertising or in publicity, amongst other things.

3.36 : sustainability issue ; topic included in *sustainability aspect* (3.34)

3.37 : sustainable development : development that meets the needs of the present without compromising the ability of future generations to meet their own needs

Note 1 to entry: Sustainable development is about integrating the goals of a high quality of life, health and prosperity with social justice and maintaining the earth's capacity to support life in all its diversity. These social, economic and environmental goals are interdependent and mutually reinforcing. Sustainable development can be treated as a way of expressing the broader expectations of society as a whole.

[SOURCE: ISO 26000:2010, 2.23]

3.38 : sustainable procurement : *procurement* (3.18) that has the most positive environmental, social and economic impacts possible over the entire *life cycle* (3.12)

Note 1 to entry: Sustainable procurement involves the *sustainability aspects* (3.34) related to the *goods* (3.7) or *services* (3.23) and to the *suppliers* (3.30) along the *supply chains* (3.32).

Note 2 to entry: Sustainable procurement contributes to the achievement of organizational sustainability *objectives* (3.15) and goals and to *sustainable development* (3.37) in general.

3.39 : tier 1 supplier : *supplier* (3.30) providing *goods* (3.7) or *services* (3.23) directly to the procuring entity

3.40 : transparency : openness about decisions and activities that affect society, the economy and the environment, and willingness to communicate these in a clear, accurate, timely, honest and complete manner

[SOURCE: ISO 26000:2010, 2.24]

3.41 : universal design : design of *goods* (3.7), environments, programmes and *services* (3.23) to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design

Note 1 to entry: Universal design shall not exclude assistive devices for particular groups or persons with disabilities where this is needed.

Note 2 to entry: Terms such as universal design, accessible design, design for all, barrier-free design, inclusive design and transgenerational design are often used interchangeably with the same meaning.

[SOURCE: ISO/IEC Guide 71:2014, 2.18, modified — The word “products” has been replaced by “goods”]

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PROCUREMENT TRAILBLAZER MANAGING RESILIENCE IN PHARMA SUPPLY CHAIN

**BALAKRISHNAN IYER, CHIEF PROCUREMENT OFFICER
– DECCAN FINE CHEMICALS INDIA PVT. LTD
PAST PRESIDENT - IIMM**

In the past three decades, the worldwide value of pharmaceutical goods traded has grown sevenfold, from \$90 billion in 1990s to close to \$700 Billion in 2020. Amid this growth, supply chains have become increasingly global, complex and are becoming less transparent. Pharma Companies are outsourcing production to global contract manufacturers, adding new modalities and exploring novel ways to reach patients. For some products, this results in supply chains that are so complex that they start in Asia and circumnavigate the globe twice. Leading pharma companies have succeeded in shifting their supply chains to drive growth and manage costs. But unless they assess and plan for the risks that come with these changes, they can suffer huge losses.

Nearly 50 percent of respondents to a recent survey cited sole sourcing of inputs as a critical vulnerability, and 25 percent point to a lack of visibility into supplier risks. Although supply-chain risks are unavoidable, companies can minimize their disruptive effects through greater visibility, rigorous risk management, and newer technologies that help companies better anticipate and respond to shocks. But first, building supply-chain resilience begins with understanding the nature of the risks the chain faces.

Recently, I had a chance to interview Mr. Swapn Malpani Joint President and Global Head- Supply Chain and Procurement in Cipla and Member of Cipla's Global Management Council and understand what it all means for the future of the Pharma supply chain.

Balakrishnan Iyer: In your many decades' career at Pharma industry, how have you seen the Industry operations evolve? What factors have shaped Pharma supply chain the most over this period?

Swapn Malpani:

- It's a great question and as I reflect today, the global pharmaceutical industry is going to be over

a \$1 trillion¹, with several large global players including big pharma innovators, and generic companies. In my opinion this evolution has been influenced by technological progress, changes in regulatory oversight, research, and development of new categories of products and services, introduction of generic products, changes in market dynamics and changes in consumer or patient choices.

- **In the past two decades**, the worldwide value of pharmaceutical goods traded has grown sixfold², from over \$100 billion to over \$600 billion. Amid this growth, supply chains have become increasingly global, complex, and opaque. More companies are outsourcing production to contract manufacturers, adding new modalities (such as cell therapy), and exploring novel ways to reach patients. **it's critical to ensure that they can withstand shocks.**
- **According to the Indian Economic Survey 2021, the domestic market is expected to grow 3x in the next decade. India's domestic pharmaceutical market is at US\$ 42 billion in 2021 and likely to reach US\$ 65 billion by 2024 and further expand to reach ~US\$ 120-130 billion by 2030³. This exponential growth due to low cost of production & R&D boosts efficiency of Indian Pharma companies.**
- **Also, disruptions have become common place in current VUCA world that can immobilize pharma companies putting patients' life at risk, therefore we need to build a resilient supply chain that can withstand shocks**
- Although the pharma supply chain is more global than those of many other industries, companies often source critical materials from a single region, putting them at risk of shortages during natural disasters and geo-political conflicts. Therefore, companies have triggered de-risking strategies to develop local suppliers and

developing multi-region sourcing.

Balakrishnan Iyer: COVID-19 has led to major reforms in supply chains all over the world but has also brought disruption along the way. What strategies have you implemented in the past two years that helped the company to stay ahead of the competition in such difficult times?

Swapn Malpani:

Cipla Global supply chain caters to India, Emerging Markets (EM) and Regulated markets and therefore it's imperative to be ready to respond to changes locally and globally. Staying true to its purpose of 'Caring for Life', Cipla has mobilized significant resources over the years to re-imagine its supply chain to ensure supply security, cost leadership, serviceability, and last-mile-delivery.

The various innovative strategies and resourceful steps taken across the supply chain to enhance supply chain resiliency and overcome the challenges brought by pandemic includes following:

- Multi-sourcing
- Nearshoring
- Strategic partnership with vendors
- Vendor managed inventory
- Manufacturing network diversification
- Multi-enterprise distribution network
- Logistics pre-planning
- Milk run distribution for cold chain products
- Increasing inventory coverage for key materials and finished formulations
- Dynamic planning

Balakrishnan Iyer: How has the pandemic changed the way your organization views supply-chain risk and resilience?

Swapn Malpani:

- Some of the critical challenges faced in various facets of supply chain to meet unmet patient needs during Covid-19 pandemic has given us enough learnings establishing the need to **build a resilient supply chain that can withstand shocks of this VUCA world and ensure supply security, cost leadership, serviceability, and last-mile-delivery. I believe the supply chain risk assessment is the first step to enhance resiliency of the chain. The areas which pose risk are also the hot spots where the resiliency need to be built in structurally to create options and required flexibility to sustain future shocks.**

- **To enhance supply chain resiliency, we have mobilized significant resources over the years to re-imagine our global supply chain.** Pandemic has taught us that we need to De-risk our sourcing which was earlier dependent on a single source and overreliance on one geography for a significant part of portfolio. To mitigate future risks and disruptions to our business, we work on de-risking our business from vendor-related disruptions and be competitive in terms of costs, through Alternate Vendor / Source Development.

- Companies had begun their digital journey prior to the pandemic, but the pandemic acted as catalyst in accelerating digital innovation and adoption to bring visibility across the supply chain, which is an important pillar for bringing transparency and reducing risk throughout the chain.

Balakrishnan Iyer: We have spoken about the challenges created by the pandemic. Do you also see opportunities that have been created?

Swapn Malpani:

- In my opinion, the biggest opportunities that the pandemic has created are accelerated digital innovation and adoption, opportunities to enter new business segments through disruption of old order like Cipla entered in point of care diagnostics, hygiene essentials sector etc.
- We have observed that this hybrid model /work from anywhere has enhanced productivity of the team and that this is a new normal going forward.
- Pandemic also propelled faster adoption of digital technologies like Artificial Intelligence (AI), Machine Learning (ML) and Robotic Process Automation (RPA) etc.

Balakrishnan Iyer: Let's transition to the topic of digital. CIPLA has been at the forefront of digital innovation in the industry, establishing industry-leading lighthouses. How do you prioritize Industry 4.0 technologies for CIPLA?

Swapn Malpani:

- Rewiring the Supply chain entails embracing the Industry 4.0 technologies like the latest digitalization of supply chain, predictive modelling, and simulation techniques, so that organizations can more accurately forecast true capacity, identify, and eliminate bottlenecks, and

develop optimal solutions for their supply chains.

- In my view going digital has broadly two components 1) Leveraging digital technologies to enable data driven decision making 2) Reimagine the business processes to break silos and transform collaboration.
- To enable this, we must put together a long-term roadmap of transformation which includes building centre of excellence, building foundational capabilities in terms of mind-sets and System & data architecture. As you know Digital is a way of life for Cipla and in future as well it is going to play a pivotal role in our long-term strategy. Some of the implications are following:
 - Using wealth of data to transition from reactive to proactive approach
 - Having end to end visibility in real-time with ability to simulate what-if scenarios to pre-empt future risks and having one version of reality and truth
 - Taking advantage of new age technologies (like Artificial Intelligence (AI), Machine Learning (ML), Robotic Process Automation (RPA) and Blockchain etc.) to solve business problems and predict outcomes
- As far as prioritizing Industry 4.0 technologies are concerned, it is already a top priority at Cipla and we are progressing quite rapidly in this direction. We work through a long-term roadmap as opposed to scattered use cases which helps us bring out synergies among technologies employed and saves us from technology adventurism. Having said that, we always prioritize projects which stand to offer highest returns on its investment and are sustainable. We also identify some emerging technology in digital space and aim to be the first mover in those areas.

The COVID-19 crisis put supply chains into the spotlight. Supply-chain risk and resilience need to be embedded in an organization's strategic planning and day-to-day execution, with structured governance to ensure that decisions are made and acted on at the right level and time. Over the past year, supply-chain leaders have taken strong willed action in response to the challenges of the pandemic: adapting effectively to new ways of working, increasing

inventories, and ramping their automation and risk-management capabilities. Yet despite that progress, other recent events have shown that supply chains remain vulnerable to shocks and disruptions, with many sectors currently struggling to overcome supply-side shortages and logistics constraints. End-to-end transparency remains elusive, and a headway toward more localized, flexible supply-chain structures has been slower than anticipated. Leaders need to be able to see their organization's risks and have people continuously evaluate and mitigate them.

The coming months could turn out to be critical for supply-chain leaders. Some companies will build upon the momentum they gained during the pandemic, with decisive action to adapt their supply-chain footprint, modernize their technologies, and build their capabilities. Others may slip back, reverting to old ways of working that leave them struggling to compete with their more agile competitors on cost or service, and still vulnerable to shocks and disruptions.

References:

- 1 McKinsey article : link - <https://www.mckinsey.com/industries/life-sciences/our-insights/four-ways-pharma-companies-can-make-their-supply-chains-more-resilient>
- 2 Statista data : link - <https://www.statista.com/outlook/hmo/pharmaceuticals/worldwide>
- 3 IBEF.org : link - • <https://www.ibef.org/industry/pharmaceutical-india>

Profile of Mr. Swapn Malpani : Swapn Malpani is an accomplished Supply Chain, Procurement, Operations leader. Post BE & MBA from NITIE he has around 25 years' experience with top US & Indian MNCs in Pharmaceutical, Medical Devices, Consumer and Food Industries. A strong leader with global exposure, strategic & creative mind set and a proven track record of building & supporting organization growth, championing transformation, building talent and creating value.

He is currently Joint President and Global Head-Supply Chain and Procurement in Cipla and Member of Cipla's Global Management Council - "the Apex leadership team to set and deliver the strategic long-term growth agenda for Cipla".

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MOVING TOWARDS SUSTAINABLE SUPPLY CHAIN

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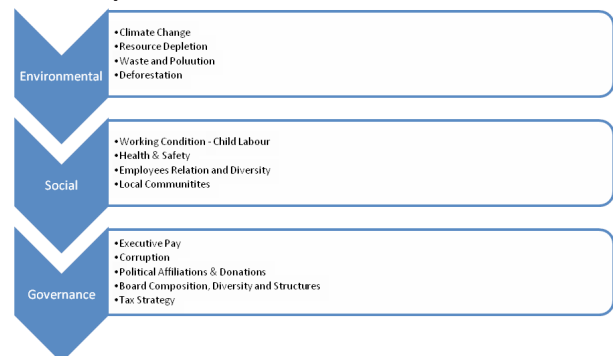
Companies Act, 1956 was amended in 2013 to include, inter alia, section 135 on Corporate Social Responsibility (CSR) and schedule VI which prescribe mandatory provisions for India Inc. to fulfil their responsibilities towards CSR. The companies with a net worth of Rs 500 crore or more are required to fulfil this responsibility through waste and pollution reduction as well as by way of contributing to the society by undertaking environment-friendly initiatives regarding their operations and growth. India's journey to the sustainable growth started late; and incorporation of some mandatory provisions in the Companies Act helped little to achieve the desired objectives. Most of the organizations were interested in complying the statutory provision to spend 2% of average profit earned over the last three financial years. They invested money in organizing health camps, setting up tube wells and establishing schools – not much to do with the sustainable development. The lukewarm approach of India Inc. towards sustainable growth of Indian economy prompted Securities and Exchange Board of India (SEBI) to introduce Business Responsibility and Sustainability Reporting (BRSR) by listed entities in May 2021. SEBI's circular is quite unambiguous about the emphasis given to company's performance on sustainability related factors along with financial and operational performance. The BRSR is intended towards compliance with Environmental, Social and Governance (ESG) parameters for the top 1000 listed entities.

ESG Parameters

The genesis of ESG can be traced back to the 1960s when a set of investors began excluding the stocks of tobacco or industries aligned towards apartheid regime in South Africa. However, it was not until 2006 that the acronym started gaining momentum when United Nations released The Principles for Responsible Investment (PRI). Consequent to the adoption of ESG as a guiding principle towards sustainable development, individuals started paying lot more attention towards the interdependence among environmental, social and economic issues. Investment started pouring in ESG compliant corporates. Responsibility apart, ESG has helped develop a thought process; creates an opportunity to build not only a sustainable society and therefore planet, but also a sustainable business by creating a trust among the stakeholders of the society and businesses alike. In this perspective, there arises a need to work out how ESG can become a business model to create a value for the organization, for the society and global citizens. Generally, financial advisors or analysts are

apprehensive about any investment which doesn't help the companies with profitable return. Research in the areas of sustainable development has shown that we are moving towards a situation of scarcity of resources, as such, the CFOs must consider a holistic view of total return on resources and assets instead of working out total return on assets only. In course of the analysis, we shall find how some of the companies have immensely benefitted the society by adopting processes which have not only increased their return on resources but also improved the overall productivity. ESG is a universally accepted template to guide us through the process of sustainable development. It would, therefore, be worth while looking afresh the components of ESG. Here is a simple template of ESG which gives a fair idea of sustainability factors we need to practice or adopt it as a philosophy for our generation.

ESG Template



The above factors have traditionally been ignored in any financial metrics – the impact of health and safety or for that matter impact of deforestation have never been areas of concern for a finance professional. One more reason could be the difficulty to assign a monetary value to each of these factors and measure their performance in financial terms. Be that as it may, there is no gainsaying the fact that issues such as these which have so far been set aside as not relevant to the objective of a firm could continue to be ignored much at the peril of our society.

Circular Economy and ESG

In traditional linear economy, the growth model revolves round the principles of “take, make and waste”. Firms produce, consumers use and dispose of thereafter. In a circular economy framework, firms not only produce, but recycle them and the consumers reuse them. The underlying premise is to produce more by deploying less resources. In the words of the Ellen

Macarthur Foundation, “the concept is based on designing out waste and pollution, keeping products and materials in use. It must be restorative and regenerative by design by limiting the production of waste and/or recycling it to make new products.” The purpose is to preserve the value of materials and products as long as possible, reduce the waste and resource consumption to minimum and reuse the products at the end of their life.

It’s indeed heartening to observe the recent initiatives taken by the Central Government to transition India’s economic growth model from linear to circular. Niti Aayog, in its press release dated 18 March 2021, has stressed the need at eliminating waste, continual use of resources in order to take a comprehensive view of products and processes. “Our production system must adopt practices around the principles of circular economy so that they not only reduce resource dependency but also gain competitiveness.” The Government has identified 11 end-of-life products/ recyclable materials/wastes that continue to pose challenges. The list includes, inter alia, electronic waste, solar panels, scrap metal, Municipal waste, agricultural waste, end-of-life vehicles.

The journey of transforming waste into wealth is long and arduous. According to the estimate of Niti Aayog, the urban India, comprising about a third of India’s population, is generating more than 60 million tonnes of municipal waste annually. This is expected to grow rapidly to 125 million tonnes per annum by 2031. No number of incinerators, landfill is capable to manage such huge waste. The task looks daunting. A recent report of Bloomberg has mentioned that Shanghai, a city of 25 million residents, has started generating household waste of 1,400 tonnes a day during the recent lock down period, up from 308 tonnes just before lockdown. This is in addition to covid related waste which has reached 3,300 tonnes a day from only 73 tonnes per day prior to lockdown. Optimizing usage of material through better product design, extending life of a product, recycling end-of-life and end-of-use product, mandatory buy back policy/return after usage are some of the areas where corporate sector is required to invest to make a circular economy function.

How does ESG fit into the landscape of a circular economy? The fundamental principle in a circular economy is to minimize waste and maximize value creation quite contrary to the linear economy which utilizes lot of resources and generates waste to a significant extent. The corporates must, therefore, focus on their ESG goals in a circular economy set up. More and more companies are expected to adopt environment-friendly initiatives such as, minimize plastic waste or recycle plastic waste to design and produce innovative products, generate power from renewable energy, adopt manufacturing practices which generate less wastages and less emission of CO₂, refurbish and extend life of white goods, electronic equipment, automobiles etc. The list is endless. According to a report of United Nations Environment Programme, while we could consume 7 gigatonnes of raw material until 1900, this has increased to 50 gigatonne by 2000 and 85 gigatonne by 2020. At this

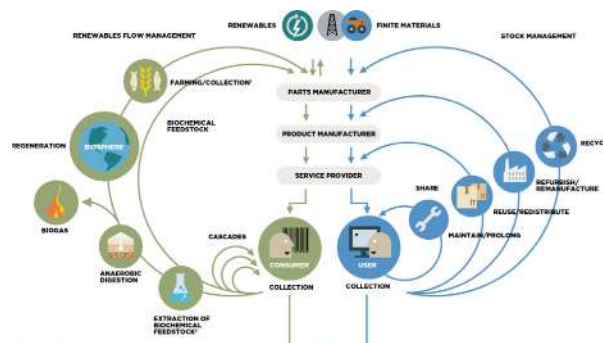
pace, it may not be possible to extract basic raw material, such as, copper, nickel, manganese, tungsten for our generation next. The circular economy aims to conserve resources by following the principle to produce more with less resources; extend the life of a product; micro-manage the waste material by adopting innovative design ideas. In effect, the E and G of ESG, play a dominant role for the successful operation of circular economy. The S factor has nothing much to do with the circular economy. The societal norms can be a natural outcome of sustainable growth model. The ESG template could form the basis of disclosure for the corporates as mentioned earlier – its impact in the framework of circular economy, however, will depend on the product, its design, lifecycle, recycle and of course the logistics part. The process diagrams of Linear economy and circular economy indicating the various phases can give a fair idea of the inherent supply chain.

Linear Economy – Different Phases



One of the most comprehensive system diagrams for circular economy published by Ellen Macarthur Foundation is reproduced below.

Circular Economy – System Diagram



Source: Ellen Macarthur Foundation – Circular economy system diagram (February 2019)

It may be seen from the diagram that the two sides, i.e., the natural cycle or biological cycle on the left side of the diagram and the technical cycle on the right-hand side represent an overall picture of a circular economy. The middle portion or the spine of the diagram depicts the traditional linear economy which is also an important component of the circular economic system. In the technical cycle, the products are collected, recycled, remanufactured/refurbished, redistributed and reused. On the other hand, in the biological cycle, the nutrients from biodegradable materials are returned to the earth, through processes like composting and anaerobic digestion. The restoration and regeneration of nature keeps the cycle in continuity. The spine of the diagram depicts the characteristics of a linear economy – parts and product manufacture. At the top of the diagram, the biological nutrients which are renewables and the technical nutrients which have finite usability have been depicted. This is also to explain why prolonged use of technical nutrients are necessary, as these are likely to

generate some amount of waste which cannot be absorbed in nature. One interesting feature of the diagram is the distinction between consumer and user at the bottom of the diagram. The biological nutrients, such as, food, water etc. are consumed whereas, the technical nutrients, such as, automobiles, fridge, TV are used.

Sustainability in Supply Chain : Two issues emerge from the foregoing analysis of circular economy: one, how well equipped is the supply chain management to bring in the requisite dose of sustainability in order to make the philosophy of circular economy imbibed in our life and two, how do the corporate sector strategize to inculcate the sustainability across the business?

The decision to reuse, refurbish or recycle a product is feasible only by improving the sustainability in the supply chain operations. The linear economy presupposes a linear supply chain management once a product is designed and planned to be manufactured. The movement from procurement, operations, transportation, distribution cycle ends, the moment it is delivered to the customer. The clock for circular economy begins where the linear economy ends. The concept of circular economy gives rise to the need of circular supply chain. Customers will decide to return a product either because it is end-of-use, or it is end-of-life. In a linear economy, in either of the cases, the customer attaches net zero value. He may decide to retain the product which ceases to add value, or he decides to throw it to the garbage bin. On the contrary, in circular economy, the product is collected from the customer by the company and transported back to manufacturing unit for disassembly, repair, retrieval and finally reuse. The companies can achieve the goal of reuse by adopting reverse supply chain and return management. Linear supply chain and reverse supply chain, together, will form circular supply chain. In effect the circular supply chain will not be a separate activity, but it will be ingrained in the circular economy. To summarize, Circular supply chain aims to minimize waste at every level by its reuse and recycle as compared to the traditional linear supply chain which tends to leave a trail of waste at every level.

Availability of raw materials and their soaring prices are two big challenges the business houses face today. The supply chain has been badly disrupted during the pandemic and Russia-Ukraine war. Circular supply chain management, apart from the environmental impact, can provide new lease of life to many industries by reusing components and parts from end-of-life products discarded by customers. By reusing retrieved parts and materials, organizations can get maximum benefit out of the raw materials they purchase. One of the maxims that circular economy teaches is to prolong the use of material rather than sending it to earth fill. Instead of throwing products away at the end of their lifecycle, if they are reprocessed, it adds substantial value in the supply chain. The system benefits and adds value in the supply chain for the customers who disposes of the product, the manufacturer who remanufacture and the end user who reuses the product. This is true even for secondhand products. In aircraft industry there is a system called

cannibalization, in which good parts from one aircraft brought in for overhaul are used in another aircraft undergoing overhaul. The idea is to effect quick delivery to the customer and economize in the cost of overhaul, as an old part, instead of getting discarded, is used for replacement.

From Waste to Wealth

A few real-life examples and stories can help us how the principle of sustainability is at work at the global level and at our own backyard.

Jain Irrigation Systems: The company which supplies small irrigation system has helped the small farmers of Maharashtra facing acute shortage of water to adapt micro-irrigation systems to Indian conditions. It has taught the farmers how to balance the use of fertilizer, pesticides, energy with less water and still increase yields.

New Britain Palm Oil: The company's sustainable methods of agriculture helped farms use 50% less chemical pesticide and achieve 1.6% YoY increase in yield.

Shree Cement: Shree cement used the hot exhaust from the kiln (used for cement manufacture) to generate electricity as a byproduct. The electricity so generated is cheap and sold by the company in the open market. Thus, the company was able to add value with deployment of less resources.

Nike: Nike has designed a recycled polymer known as flyknit which is woven in the upper part of a shoe to make it lighter and improve performance. Flyknit produces 60% less manufacturing waste than traditional method.

Nestle: In South Africa where water is a scarce commodity, Nestle successfully achieved their mission of wastewater reduction which helped them to reduce water management cost by 12%. Water recovery helped increase plant production by 32%.

Shakti Plastic Industries: Shakti Plastic Industry is engaged in end-to-end waste management services that cater to individual collectors, companies, retailers, manufacturers, municipalities. Their mission is to transform millions of tonnes plastic waste into new products of great wealth. Plastic waste management has made significant strides in India in the last decade. There are more than 100 firms operating successfully in India.

Sustainability Strategy

- **Product Innovation:** The most important factor to achieve sustainability is to invest in innovation. Most of the examples of sustainability that we have given above are add-on in nature. Add-ons can, at the best, nudge a little bit towards sustainability thought process. To achieve our long-term goal, we need a paradigm shift in our product design. Innovation is fundamental to how to develop products that meet consumers' needs.
- **Process Innovation:** There is a strong link between

process innovation and sustainability engagement. While environmental performance should be the main criteria for process innovation, the cost factor, productivity factor and technology factor must be given their due importance in the innovation. In the above examples, Nestle has redesigned its product process which has reduced cost and improved productivity. While driving innovation in production process, business houses must embrace the idea that resources shouldn't be used faster than they are replenished.

- **Business Models:** In order to make sustainability a success story, we must bring in the Finance professionals and environmentalists on the same platform, else the CFOs will talk about EBIT and ROI and the sustainability people will be concerned about CO₂ reduction in wastewater. The new-age business models are required to incorporate suitable performance metrics to justify any substantial investment in product and process innovation to achieve ESG norms. As mentioned in the beginning, Return on Resources along with Return on Assets both are important in evaluating corporate performance.
- **Customer Loyalty:** The objective of any sustainable product is to propel a brand stand out in the market. If the customer is convinced that he is using a product which is ESG complied, the market share of the product will increase for sure. But to achieve this, a customer needs to be educated through advertisement and sales promotion. If a customer is given a choice to consume electricity generated from a coal-based power plant or from a solar plant, *ceteris paribus*, he will go for the latter.

Way Forward

European Green Deal aims to make Europe climate neutral by 2050. US also aims to hit net zero by 2050. China has announced plans for carbon neutrality by 2060 and India has set a target to achieve it by 2070 in the recently held Glasgow summit. While the intent and visionary outlook of the global political leadership are appreciable, there is a need to micromanage the process in the corporate sector to achieve the sustainability goal. Its implementation is complex as it is a cross company process. Veronica H. Villena and Dennis A. Gioia, in their article, "A more sustainable supply chain" in Harvard Business Review (March-April 2020) writes that though a rising number of multinational corporations have pledged to work only with suppliers that adhere to social and environmental standards, they face insurmountable difficulties in compliance parameters from the tier I suppliers and tier I suppliers in turn from tier II suppliers. According to the authors, "We studied a representative set of each MNC's (covering three top MNCs, one each in automotive, electronics and pharmaceuticals & consumer products) suppliers – a total of nine top-tier and 22 lower-tier suppliers, based variously in Mexico, China, Taiwan, and the United States. What we discovered was that many were violating the standards that the MNCs expected them to adhere to. The hoped-

for cascading effect was seldom occurring."

The situation in India is much worse. Even in the central Government run enterprises, the ESG norms are not followed. The procurement procedure followed in a B2B scenario is mostly devoid of scrutinizing fulfilment of sustainability norms. The power plants, the leather industry, the packaging industry, the cement factories are all violating sustainability norms in India. More important is the issue of awareness – they are unaware of the accepted social and environmental practices and regulations. The discharge of toxic water in the river by the leather units, emission of CO₂ in coal-fired power plants, brick kilns, waste gas from clinker in cement plants continue unabated in most of the industrial towns in India.

To reach vision 2070, the Government must fix short term goals, initiate pan India awareness programmes, streamline the circular supply chain, incentivize the small and medium size organizations on similar lines as Production Linked Incentive Scheme (PLI) for motivating them to design products fulfilling sustainable norms, revamp the logistics sector, make sufficient budget allocation for investment to achieve sustainability goal.

This decade and the decade thereafter pose great challenges for all the stakeholders not only to implement sustainable growth models but to walk an extra mile to convince the customers about its necessity. Customers can play a dominant role - make sustainable products irresistible for them.

Moving from intention to result is what is desirable from the political leadership. "The danger of not acting is clear: A supply chain is only as strong as its weakest link."

References:

1. Ellen Macarthur Foundation Website: ellenmacarthurfoundation.org
2. Frugal Innovation: Navi Radjou and Jaideep Prabhu
3. How to talk to your CFO about sustainability by Tensie Whelan and Elyse Douglas: Harvard Business Review: January-February 2021
4. The performance frontier by Robert G. Eccles and George Serafeim: Harvard Business Review, May 2013
5. A more sustainable supply chain by Veronica H. Villena and Dennis A. Gioia: Harvard Business Review, March-April 2020
6. Niti Aayog: Press release by PIB, 18/03/2021
7. SEBI: Circular no SEBI/Ho/CFD/CMD-2/P/CIR/2021/562 dated 10/05/2021
8. Waste to wealth: the circular economy advantage: Peter Lacy and Jacob Rutqvist

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SUSTAINABLE PROCUREMENT POLICY GUIDELINES

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Introduction : Sustainability is a Societal Goal with three dimensions: the social, economic and Environmental dimensions. This concept can be used to guide all the procurement-related decisions and processes and gain benefits for long term on sustainable basis.

Sustainable procurement refers to how businesses can integrate principles of sustainability into the company's procurement policy & processes by identifying and reducing the environmental impacts of their procurements and taking decisions in a socially responsible manner while ensuring value for money on a life-cycle basis.

Sustainable procurement means making sure that the products and services we buy are as sustainable as possible, with the lowest environmental impact and most positive social results.

In this article, let's Discuss about basic understanding of Sustainability and Sustainable Procurement Policy Guidelines.

Key Words: Sustainability, Three Pillars of Sustainability, social, economic and Environmental dimensions, Sustainable Procurement.

Sustainability: A Long-Term Vision : Sustainability is the ability of something to Last for Long. Sustainability is Important because we live on a Planet of **Finite Resources** - though these Resources are Naturally Available in very very Large Volumes - of course has **Some Limitations**. Often we **Treat and taking for granted that these Resources are Infinite and Abundantly Available for Ever**. These Mis-Conceived Notions and Perceptions proved us wrong very lately to realize and recognize that, there is Limitations to Everything. Earth's resources are not unlimited and that humans must use and conserve resources in a manner that allows their continued use in the future.

Therefore, we need to Conserve the Natural Resources, for not only meeting the **Requirements of Present Generations**, but also need to **Preserve for Future Generations**.

Sustainability means meeting our own needs without compromising the ability of future generations to

meet their own needs. In addition to Natural Resources, we also need Social Well being and Comfort of Living, Wealth and Economic Growth. So Sustainability add ups two more Dimensions : **Social and Economic Factors in addition to Environmental Factors**.

Three Pillars of Sustainability : Embedding all three aspects sustainability, refers to concerns for Community Comfort of Living and Equity – Human Factor (**Social**) and Wealth Generation, Progress & Development (**Economic**) and Conserving & Preserving of Natural Resources (**Environment**). These are also known as "**Triple Bottom Line**" – Called **3P's (People (Social); Profit or Prosperity (Economic) and Planet (Environment)**. These forms Three Pillars of Sustainability. Adopting sustainable practices, whether large or small, can have significant impacts in the long run.

Sustainability is a societal goal with three dimensions: the Social, Economic and Environmental. This concept can be used to guide decisions at the global, national and at the individual consumer level.

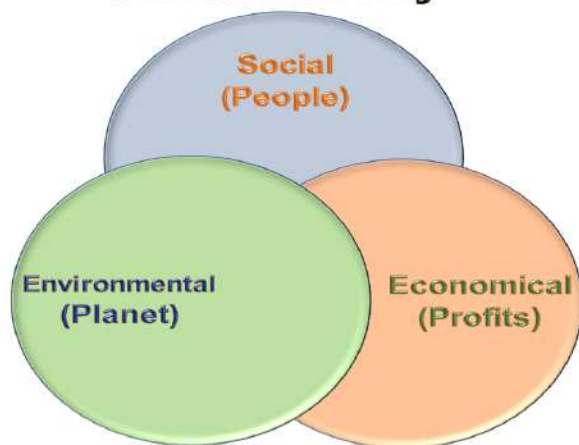
Therefore, sustainability is made up of Three Pillars: **Society, Economy, and the Environment**. These principles are also informally used as **People, Profit, and Planet**.



Sustainability is a holistic approach that considers **Social, Economic & Environmental** Dimensions, recognizing that all must be considered together to find a balanced co-existing of all **Humans, Flora (plant life); Fauna (refers to animals)** and others, Living for Today & Tomorrow.

Let's now Discuss some more details about each Dimension.

The Three Dimensions of Sustainability



Social or People Pillar:

Sustainability can't be complete unless People or Humanitarian issues are addressed like Negative Social Repercussions, e.g. Unfair Wages, Poor Working Conditions or Polluted Water Sources, Child Labor, ill Treatment to any Sect of the Population or any kind of Discrimination based on Age, Disability, Ethnicity, Origin, Political Belief, Race, Religion, Gender or Sexual Orientation etc. Therefore, Social or People forms as one of the Important Three Pillars of Sustainability. **It is mostly concerned about Quality of Life, Standards of Living, Education, Jobs, Community Development, Access to Enough Resources in order to keep their Families and Communities Healthy and Secure, Equal Opportunity, Welfare, Social Cohesion, Development of Human Capital, Law & Ethics.**

From the Organizational Perspective, it is Positive and Negative Impact an Organization has on its most Important Stakeholders like Employees and their Families, Customers, Suppliers, Channel Partners, Communities it Operates in, and any other Stakeholders ie any Person Influencing or being Affected by the Organization. Some of the Social Sustainable Aspects include Social Values - Community Engagement, Ethical

Standards & Practices, Community Development & Social Well-being; Educational, Cultural Development; Upholding the Laws and Regulations Governing Sustainability; Prohibit unlawful Discrimination and Harassment; Child Labor etc.

For Community Engagement & Promotion, companies are now coming up with **Corporate Social Responsibility (CSR)** through which in many ways Organizations are giving back to the Society, including Fundraising, Sponsorship, Scholarships and Investment in local Public or Social Projects.

On the employee side, businesses shall focus on Fair Salaries or Wages, Treating Employees Fairly, Health and Safety of Employees, Safe Working Conditions, Retention and Engagement Strategies, including more responsive benefits such as better Maternity and Family Benefits, Flexible Scheduling, and Learning and Development Opportunities etc.

Economic Sustainability Pillar

Economic Sustainability refers to practices that support Long-term Economic Growth and Prosperity on the Individuals, Local, National and International Economy without Negatively Impacting other Two Pillars of Sustainability – Social & Environmental aspects. That means it is Balance between Economic Growth at the same time Responsibility towards Social, Environmental and Cultural Factors. Economic Growth without concern to other Two Factors may lead to huge imbalance of wealth and income levels, poverty, social disturbances, indiscriminate use of natural resources, disposals of waste, damage to climate and a whole load of other repercussions for society and the environment.

Economic sustainability entails evaluating the Social and Environmental impact of economic activity and devising sustainability goals to create a more livable future.

From the Corporate perspective, to be Economically Sustainable, a business must be profitable. Economic Sustainability means the positive and negative impact an organization has on the Individual, Local, National and International Economy. This includes creating employment, generating innovation, paying taxes, wealth creation and any other economic impact an organization has.

Economic Sustainability is all about Economic Growth & Prosperity, Job Creation, Income Generation, Profits, Efficiency & Competitiveness, Production & Consumption, Innovative or Alternative Usages of Resources, Cost Savings, Cost of Employment, Cost of Living etc.

Environmental Pillar

Environmental Sustainability is all about **Consumption & Conservation of Earth's Natural Resources, Resource Management, Environmental Protection, Habitat Restoration & Preservation, and Measures to Reduce Factors that are Extremely Detrimental to the Environment, Materials & Wastes, Natural & Cultural Landscape, Bio-Diversity**. This is Ecological Integrity to maintain all of earth's environmental systems, keep them in balance while natural resources within them are consumed by humans at a rate where they are able to recycle or replenish themselves.

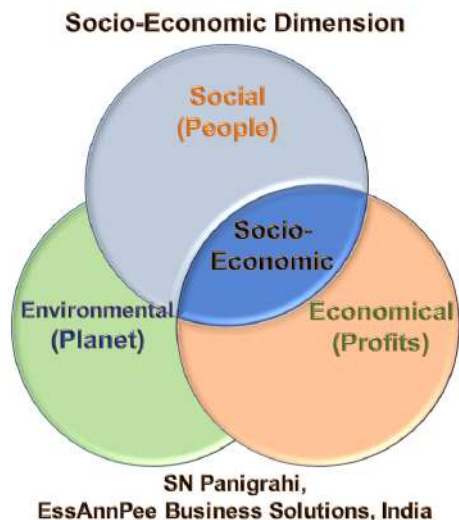
From the Organizational Perspective, the Environmental impact is the positive and negative bearing an organization has on its Natural Environment & Climate. This includes Reducing its Carbon Footprint, Excessive Usage or Wastage of Natural Resources, Toxic Materials and so on, but also the active involvement in Removal of Waste, Reforestation and Restoration of Natural Harm done and finding Renewable Alternatives, Prevent Global Warming and Protect our Animals and Habitats and Maintain Diversity.

Many companies are now a days focusing on reducing their carbon footprints, Reducing use of Fossil Fuels (Coal, Oil and Gas) & Use of Renewable energy, such as solar, wind, hydroelectric, and biomass; Recycling of Metals, such as iron and steel, and minerals; Packaging Waste, Crop Rotation, Water usage, or other Damage to the Environment.

Further Deep Dive to Understand the Concept of Sustainability, let's discussion sectorial intersections between the three broad dimensions.

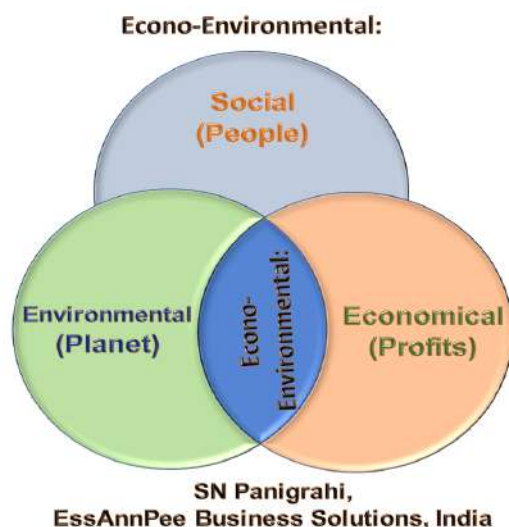
Socio-Economic Dimension :

This Segment is interaction between Social and Economic dimensions, called **Soci-Economic Dimension**. This is about Economic Impact on Society - that is Impact of Social Investments on Education, Health, Safety, Security, Level of Empowerment, Community Development and other Economic Activities to Create Employment, Income Generation, Job Creation, Skill Enhancements, Value to Society through Innovation, Fair Trade, Tax Payment, Business Ethics, Spending on Employment, Worker's Welfare / Benefits, Labor Rights etc.



Also, it includes, Government Spending, Cost of Welfare Schemes, Socio-Infrastructure, Ensuring Minimum level of income deemed necessary to achieve an adequate standard of living, Subsidies, Social or Public Spending as % of GDP etc

Econo-Environmental Dimension:



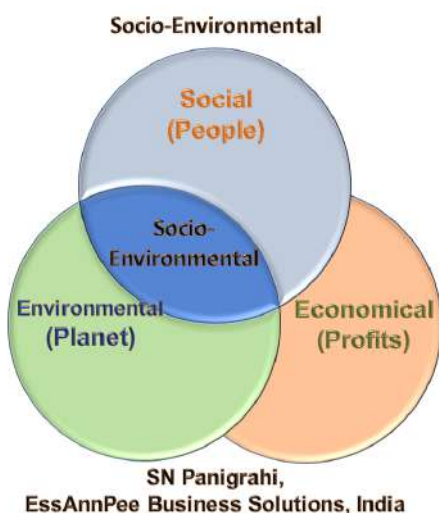
This is intersection between **Economic & Environmental Dimensions**. This is about Economic Benefits of Resource Consumption, Resource Efficiency, Alternative Use of Resources, Renewable Resources, Energy Efficiency, use of Renewable Fuels, Green Technology, Carbon Credits, Tax Breaks / Subsidies for Environmental Compliances,

Enhancing the Energy Return on Investment, Life-Cycle Management, Product Stewardship.

This isn't just for the benefit of the planet, but can also benefit big corporations by reducing wasted effort, time and money.

Socio-Environmental Dimension

This is intersection between **Social and Environmental Dimensions**.



This includes Social Acceptability, Social Well-being, Energy Security, Resource Conservation, Food Security, Portable Water, Environmental Regulations, Global Climate Change, Environmental Activism, Environmental Laws, Public Involvement, Reporting & Publishing, Environmental Justice

Sustainability is a Balancing Act:

Sustainability is impacted by three interconnected dimensions – Social, Economic, Environmental sustainability.



Each Dimension affects all the others and is affected by each in return. If we continue to Exploit the Resources Indiscriminately for current economic benefits and live without consideration for our surroundings or fellow humans, we could make the planet uninhabitable, physically, socially, and economically, for future generations.

Sustainability is **the Balancing Act** between **Society, Economy & Environment**. Increasing Convergence between these Factors brings Harmony in our well-being and quality of life; Natural Resources are Conserved, Preserved, Maintained and Environment is Protected, while thriving for Economic Development & Opportunities. When this happens it means the Environment is Maintained Healthy, our Economic Wealth is secure and our Social Life is Happy & Fulfilling.

Sustainable Procurement

Sustainable Procurement is the **Integration of Sustainable Principles into the company's Procurement Policy and Processes** to achieve not only **Value for Money on a whole life cycle basis** by ensuring that they meet the **Economic Objectives** of the **Organization** and the Requirements of the Stakeholders, but also **balancing the Sustainability** to Reduce the **Socio-Environmental** Adverse Impacts due to their Procurement & other Related Activities and **Contribute for the overall Prosperity of the Human Kind and Holistic Growth**.

Now Let's look at each Dimension of Sustainable Procurement at the below :



Procurement Policy Focus on Sustainability

Corporate sustainability is a growing concern among businesses who seek not only economic profit but also social good environmental sustainability. Most of the Organizations have their own **Procurement Policy**. In that Policy, generally they also chart out about Sustainable Procurement Objectives & Practices. These are based on the **Principle of Shared Value**, a concept that promotes **Policies and Operating Practices** that **Enhance the Competitiveness of a Company** while also

improving Economic and Social conditions in the communities in which they operate with Environmental Concerns.

Sustainable Procurement is **the act of adopting social, economic and environmental factors alongside the typical Price, Delivery and Quality considerations into the organizations Procurement Processes, Procedures & Practices.**

Procurement Sustainable Policy should integrate with Company's overall Vision & Mission; Strategies & Broad Long-Term Goals; and other Company Policies & Procedures aligned to Sustainability.

Sustainable Procurement Policy Guidelines :

A sustainable procurement policy signals buy-in at highest level of the organization and communicates its ambition and intentions across the Organization. It also provides a clear mandate for actions. Developing a Sustainable Procurement Policy following Process Steps are Recommended:

1. **Decide what Matters most to the organization** in Respect of Sustainability – The Context – The Business Environment.
2. **Set Organizational Vision & Mission with Sustainability Goals and Align Procurement Policy** with overall Organizational Mission with Holistic Approach. Ensure the policy reflects the organization's values and includes a commitment to continual improvement.
3. **Ensure the Policy Operates Effectively** with, and **does not contradict other, organizational policies.**
4. **Seek Top Management Support and Commitment.**
5. **Select the Team** (like **Create aGreen Team**) with **Clear Roles & Responsibility and Assign the Tasks with Time Lines.**
6. **Determine Core Procurement Criteria with Sustainability Norms & Choose Goods and Services** that Meet the Set Criteria.
7. **Determine the economic, social and environmental impacts of the products and services purchased** e.g. by carrying out a **Risk Assessment** looking at likelihood of impact, severity of impact, value or spend and level of influence. Better Prepare for Current and Emerging Legislations and Regulatory Requirements.
8. **Look into Long-term Perspective of Cost & Benefits;** Savings through whole life cycle costing.

9. Consider the **Strategic, Reputational and Operational Implications** to the organization.

10. **Drive Change through Collaborative Approach** involving all the Concerned Stakeholders like Internal Team Members, Suppliers, Service Providers, Channel Partners etc

11. **Educate & Train** the Stakeholders - Help to Motivate them and Raise Awareness.

12. . Update and Time to Time **Communicate** with the Concerned Stakeholders.

13. **Implement a company Sustainability Program or Policy by Fixing the Key Performance Indicators (KPIs)** and objectives to measure the success of the policy against Sustainability Targets.

14. Implement a **Centralized Monitoring, Recording, Reporting & Governance System.**

15. **Measure Supplier and other Service Provider's Performance** with respect to Sustainability.

16. Take **Corrective Measures** if any Deviations found and **Strive for Continuous Improvement.**

17. **Influence the Suppliers & Market to Adopt more Sustainable Products and Services.** Create Awareness Campaigns.

18. **Promote Supplier Diversity**, e.g. by Buying from Small and Medium Sized Enterprises (SMEs) specially from **Local Suppliers and Encourage them to Comply with Sustainability Norms.**

19. Ensure **Purchasing Decisions Doesn't Harm Sustainability Goals.**

20. **Celebrate Success of the Sustainability Attempts**, whatever even Small Achievements it may be – it will **Boost Team Self-Confidence and Motivate them to Achieve further More.** Thank everyone who supported the Sustainability Endeavour. **Success** can beget **Success** to **Cultivate a Culture of Achieving – Celebrating Success – Continuing with further Improvements.**

Conclusions : Sustainable Procurement is the Integration of Sustainable Principles into the company's Procurement policy & Processes to Reduce the Socio-Environmental Adverse Impacts due to their Procurement & other Related Activities and still ensuring that they meet the Economic Objectives of the Organization and the Requirements of the Stakeholders by balancing the Sustainability.

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SUSTAINABLE SUPPLY CHAIN AND RESPONSIBLE SOURCING

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Agriculture is the backbone of India's rural economy but livestock rearing is also a vital contributor. Largely all rural households own livestock and which is often the only sustained source of income for poorest households.

ITC endeavours to integrate sustainability in the supply chain(s) for its products and services across its diversified business portfolio.

ITC's supply chain includes farmers, third party manufacturers, service providers, transporters, suppliers of agriculture / non-agriculture materials and capital goods, franchisees, dealers and distributors. ITC believes in collaborating with farmers to raise awareness to make them more sustainable and help build their adaptive capacity and resilience to emerging risks like climate change, water stress and other extreme weather events.

In 2008, ITC started working with dairy farmers in Munger, Guntur, Nellore-Telangana, Uttar Pradesh, Bhopal, Mandsaur, Sehore, Shivpur, Ujjain, Chitrakoot-Madhya Pradesh, Maharashtra, Andhra Pradesh, as part of the integrated animal husbandry programme under the corporate social responsibility (CSR) initiative. Ultimately this helped improve the socio-economic conditions of dairy farmers and attract more people to join the sector.

Eastern part of India was largely milk deficit. In Munger (Bihar), the programme was well implemented. A network of 5000-odd dairy farmers from 250 villages was covered under this CSR initiative. This helped in strengthening the dairy farmers base by collecting milk through cooperative model, spreading awareness about animal husbandry among the farmers and extending them veterinary services so that their cattle produce more milk. These dairy farmers started sell their milk to Bihar's state milk cooperative - Sudha Dairy.

Further to support the farmers, ITC decided to take a plunge in the dairy business.

To begin with, ITC set up milk processing plant on 6.4 hectares in Munger and started producing milk powder with the milk collected. The milk powder was initially used in-house by Food Division that makes biscuits, staples, snacks, noodles and confectionery.

Currently, 74851 cattles of over 44000 dairy farmers from 501 villages in 8 districts of Bihar and 2 districts of West Bengal are supported through training

programmes on clean milk production and animal Husbandry services.

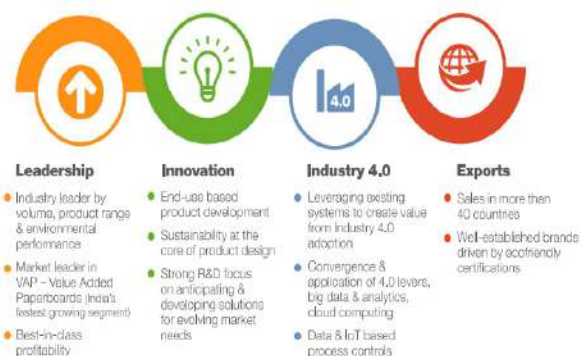
ITC's Livestock Development Programme provides artificial insemination services to produce calves with significantly higher milk yields - producing enough surplus that can be sold. Cattle Development Centres in villages provide services right at the owner's doorstep which also include veterinary support to ensure proper health and nutrition.

Having surplus milk for sale brings in extra income, especially useful for poor households. With the additional income and experience, families can invest increasing their herds, paving the way for dairying to become a viable livelihood option.

Cattle-owners are encouraged to join together and form milk marketing societies so that they can reduce logistic costs and connect to larger markets to get higher prices. In selected areas, ITC also sets up modern milk collection centres where scientific testing ensures better prices for better quality, motivating owners to invest more in cattle health and nutrition.

With a well established supply chain, now ITC aims to subsequently scale up its dairy business and become a pan-India dairy entity.

ITC Paperboards & Specialty Papers Division (ITC PSPD) : Is India's largest, greenest and most technologically advanced paper & paperboards business. It offers innovative and sustainable packaging, graphic, communication, printing and specialty papers and paperboards. Its deep understanding of sustainability and compliance to global standards has made the Business the leader in the country's pulp and paper industry.



Leadership through Innovation & Sustainability :

Starting operations in 1978 in Bhadrachalam in the state of Telangana. ITC PSPD today operates four manufacturing facilities all of which have world class assets, practice TPM and are now adopting industry 4.0 techniques with increasingly data-driven processes.

The business largely draws its raw material from farmer-managed plantations in India, reducing dependence on imported pulp. Its state-of-the-art Bhadrachalam plant has an approximated annual fibre intake of 1.5 Million Tons enabling substantial import substitution and thereby :

- Supporting sustainable livelihoods for small farmers in the agro-forestry value chain
- Contributing to the national Make in India mission
- Creating economic, social & environmental value for the nation

Promoting a Greener Value Chain



First in India certifications:
FSC® (Forest Stewardship Council®)
and C1 GreenSource Platinum
& Platinum Plus

Benchmarking production
to best global environmental
standards

Proactive farmer connect
to develop renewable
pulwood plantations
responsive & sustainable
raw material

Largest waste management
initiative in the Indian industry

Innovating to Substitute Single-use Plastics :

Managing plastic waste , in particular single-use plastics is a key global environmental challenge. Leveraging the Company's R&D capability for cutting edge innovation. ITC PSPD is developing sustainable paperboard and packaging solutions and has launched several products.

ITC PSPD is the largest manufacturer of Packaging and Graphic Boards in South Asia. Along with its sustainable packaging solutions, its product basket also includes a diverse range of Speciality Papers & Boards to fulfil a variety of needs. Strongly market driven, the product portfolio focusses on value addition, new product development, quality enhancement, innovation and sustainability. ITC PSPD's products and pool of knowledge-based services are much sought after by discerning customers both in India and internationally for sustaining and improving their competitiveness.

Biodegradable Boards

- Completely biodegradable under industrial composting conditions
- Liquid/grease barrier at par with traditional plastic-coated boards
- Base board from sustainably managed plantations



Recyclable Boards

- Completely recyclable in standard recycling conditions
- Excellent liquid/grease resistant properties



Barrier-coated Boards

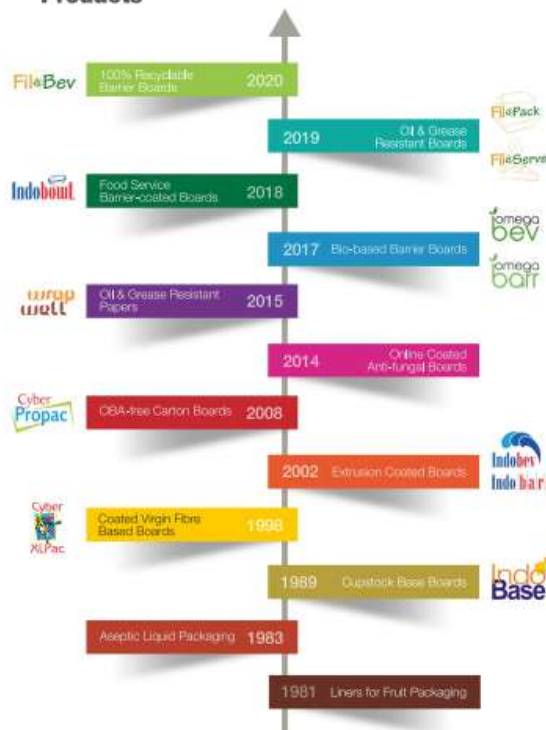
- Paperboard with the LDPE reduction coating, sustainable & reducing climate consumption
- Recyclable using industrial recycling mechanisms



Changing the Game Paradigm :

In India ITC PSPD has pioneered the concept of creating strong paper and paperboard brands, distinguished by clear performance parameters and consistency.

First-to-market Products



Environmental Stewardship & Creating Value for Society

ITC is committed to minimizing the environmental footprint of its operations and maximizing its contribution to nurturing natural resources. All ITC businesses including ITC PSPD units are dedicated to continuously improve their environmental performance. Beyond its operations, ITC PSPD focusses on both ends of the value chain with two large scale initiatives an afforestation Programme to ensure sustainable raw material sourcing and Wellbeing Out of Waste (WOW) which aims to improve urban solid waste management.

ITC's Afforestation Programme :

Creating green cover, supporting sustainable livelihoods, enabling large-scale CO₂ sequestration

- Under the Farm Forestry Programme, high yielding, site specific, disease-resistant saplings specially developed by ITC R&D are sold to farmers and extensive support is provided in terms of best practice along with buy-back guarantee.
- Under the Social Forestry Programme, tribal and marginal farmers are assisted with loans, saplings at subsidized rates and extension services.
- The Agro-forestry model, which combines tree growing with field crop production, ensures both food and wood security.

Pulpwood Plantations – Benefits for Stakeholders :

- Farmers : earns significantly higher incomes which is especially beneficial to poor farmers
- Indian Paper Producers : gain access to a local, renewable & responsible raw material source
- Environment : green cover, carbon sequestration, top soil retention, ground water replenishment



Wellbeing out of Waste (WOW) :

Promoting Reduce-Reuse-Recycle, generating livelihoods, working towards a circular economy

ITC's WOW initiative promotes awareness about the importance of source segregation, recycling and composting and establishes systems to enable effective practice. Working in collaboration with local municipalities, waste handlers and ragpickers are trained to provide an efficient collection service that covers virtually all segments : households, offices, schools, hospitals, commercial establishments, etc.



Responsible Sourcing of Fibre by Paperboards and Specialty Papers Division

The Paperboards and Specialty Papers Division (PSPD) processed 1,799,834 tonnes of raw materials (about 73% of the total raw material procured by ITC), out of which 99.7% were from renewable sources.

Approximately 66% of the total fibre requirements of ITC's PSPD is met by pulp, manufactured at the Bhadrachalam unit. Another 11% comes from recycled fibre processed at the units in Kovai and Bhadrachalam. The balance 23% is imported pulp used at Bhadrachalam and Tribeni units.

In terms of traceability:

- Approximately 87% of the fibre produced in Bhadrachalam is from wood sourced from ITC's Social and Farm Forestry initiatives.
- The fibre used at the Kovai unit is either recycled or reclaimed fibre.
- Overall, 100% of the fibre used by ITC's PSPD is of known and legal origin.

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CLIMATE POSITIVE SUPPLY CHAINS - A SIMPLE APPROACH TOWARDS SUSTAINABLE BUSINESSES

- DR. NAVAL KARRIR, INTERNATIONAL EXPERT ENERGY
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Definitions

1. **Climate Positive:** activities that go beyond achieving net-zero carbon emissions to create an environmental benefit by removing additional carbon dioxide from the atmosphere.
2. **Supply Chains:** a network between a company and its suppliers to produce and distribute a specific product / service to the final buyer. This network can include different activities, people, entities, information, and resources.
3. **Sustainable Business:** A sustainable business is one where profitability, concern for the environment and social commitment are in harmony.
4. **Circular Economy:** is a systemic approach to economic development designed to benefit businesses, society, and the environment.

As the clamour for climate emergency gets shriller by the day businesses across the globe are called out to do more than the usual survival and profitability metric.

More often than not, the purpose of action is lost by businesses in the complexity of the actionable agenda as they try to balance the expectations of the shareholders (Return on Investments - Profitability) and various other stakeholders (Economic Return on Investment that is Opportunities + Profitability), who view businesses from their own and different vantage points.

Moreover, in today's world, businesses per se are defined as the entire supply chain and their strengths defined by the sustainability of their weakest links.

Hence, following simple steps can be an approach towards sustainable business that meets the expectations of both shareholders and various stakeholders concurrently.

1. **Business Process Reengineering (BPR) - The Value-add paradigm for processes, products and services**
BPR involves the radical redesign of core business processes to achieve dramatic improvements in productivity, cycle times and quality.

Proposed methodology can include

- a. Map the current state of business processes: collection, and collation of both primary and secondary data from all resources—both software tools and stakeholders. Understand how the process is performing currently. Use SMART (Specific, Measurable, Achievable, Realistic and Tangible) indicators for mapping the processes.
- b. Analyse Indicators and find any process gaps or disconnects: Identify all the errors and delays that hold up a free flow of the processes.
- c. Look for improvement opportunities and validate them: remove redundancies and use Digitization Systems: Office Automation Systems (OAS) to improve system effectiveness and creation of a Management Information System (MIS) for recording and analysis.
- d. Design a cutting-edge future-state processes map: Create a new process map (ask questions on existing processes: why does this process exist? Can it be removed? Or replaced? Or Combined?) that solves all the problems identified above and create a process map without redundancies and overlaps.
- e. Designate Key Performant Indicators (KPIs): for every step of the process for continuous improvements through a Decision Support System (DSS) - placed at significant nodes of decision matrix. The 'span of control' and 'Limit of authority' will have to be determined and mandated for personnel manning the DSS.
- f. Implement future state changes and be mindful of dependencies. Inform every stakeholder of the new process. Only proceed after everyone is on board and educated about how the new process works.
- g. Constantly monitor the KPIs.
- h. Design and implement a dynamic Monitoring and Evaluation (M&E) Protocol: for continuous evaluation and mid-course corrections if required.
- i. Redesign the product / service: Even simple changes to product / service design can be useful, example for 1) product – from reducing weight to making it

easier to disassemble — can reduce energy consumption and waste throughout the product life cycle. In some cases, innovation or new technologies may make it possible to eliminate components or ingredients entirely and thereby shorten the supply chain for 2) services - removing redundancies through network optimization can assist in saving both costs and time.

A handy tool at the supply chain level is examining possibilities of both Manufacturing postponement (produces a generic product, which can be modified at the later stages before the final transport to the customer) and Geographical postponement (produce product and put in the warehouse to wait for customers to order, then they will deliver it to customers in the fastest time or on time

2. Towards Circular Business and Economy

The circular business is a model of production/ services, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials, products and services as long as possible. In this way, the life cycle of products /services is optimized. In practice, it implies optimum utilization of materials, machines, money, methods and manpower at various levels in the business. Simple methodology can include

- a) Reconfiguring manufacturing and Service modalities - Streamlining production / service steps, reducing energy use, and limiting the use of pollutants and toxic materials can have a big impact on how green the supply chain is. Employing a product lifecycle management process that takes into account green considerations is the key.
- b. Shifting to green suppliers - Although some suppliers may have higher costs, green suppliers can have a big effect on the carbon implications of bringing products to the market. An analysis of alternative suppliers may uncover potential benefits that justify making a change, such as helping meet the government regulations, appealing to new categories of consumers or receiving incentives under Green Climate Funds.
- c. Optimizing logistics -By rationalizing sourcing, assembly, and distribution in relation to markets, travel distances, and corresponding fuel use can be reduced. For some products, simply working with suppliers who are closer to major markets can significantly reduce energy use.
- d. Alter service-level agreements-When evaluating the effectiveness of supply chain, it may be a good idea to add carbon economics to the traditional measurements of cost, quality, and service. Review service-level agreements for unnecessary

requirements that decrease efficiency.

- e. Shrink packaging requirements -New materials and designs allow companies to make packages smaller and lighter, allowing shipping containers to hold more and trucks to carry more products in a load. Improved package designs can also reduce the burden of recycling or eliminating packaging materials at the end of the chain.
- f. Plan for reverse supply chain activity -Products that are reclaimed from the market for an upgrade, refurbishment, recycling or disposal require some kind of reverse supply chain. This is becoming a business requirement, largely driven by consumer awareness. By planning for these events upfront, it's possible to reduce unacceptably high waste and energy costs later. How products are originally designed, assembled, labeled, and packaged can have a profound effect on the efficiency of any reverse supply chain.
- g. Consolidate shipments - There's a reason why some businesses charge less for shipping if orders are consolidated and have all items shipped at once – it saves them money. The simple idea of consolidating shipments can require careful analysis to work out which suppliers to use, where to locate facilities, and what inventory levels to maintain.
- h. Plan smarter routes- Using transportation and logistics simulation packages assists in planning distribution routes and choosing the right transportation modes. Factoring in the true costs and carbon implications can lead to more rational routes.
- i. Coordination with partners - opportunities to make supply chain greener or more transparent depend upon careful coordination with allies both upstream and downstream. Shared goals and plans with allies assist in having an efficient supply chain
- j. Take a life-cycle view- review the whole life of the product / service to understand where energy is being used and find opportunities to reduce it. Energy used while a product is in service can be significant.

3. Begin now

The ability to eliminate waste and pollution is becoming an increasingly important criterion for buyers. Circular business reinforces a positive impression of a brand and is a source of pride for employees.

The process towards a sustainable business starts with understanding the need for it and accepting that 'business as usual' is not sustainable.

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OPPORTUNITIES FOR RESOURCE EFFICIENT CLEANER PRODUCTION (RECP) FOR METAL PRODUCTS SUPPLY CHAIN IN THE BUILDINGS AND CONSTRUCTION SECTOR: LESSONS FROM SOUTH ASIA

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Background

With the objective of achieving peace and prosperity globally by the year 2030, the United Nations in 2015 declared 17 Sustainable Development Goals (SDGs) for countries to work upon. Of these 17 SDGs, two viz. SDG 11 (Sustainable Cities and Communities) and SDG 12 (Responsible Consumption and Production) point to the important role efficient supply chain management can play in promoting and reaching these goals. In addition to meeting the required demand timely, efficient supply chain management also focuses on ensuring cost efficiency and enhancing environmental performance. Both these aspects can be addressed through implementation of Resource Efficient Cleaner Production (RECP) measures. This article elucidates the RECP approach in metal industries and illustrates, through examples, the substantial resource/monetary savings that can be achieved.

The targeted metal industries in this article are especially those that supply to the buildings and construction sector. South Asia is characterized by growing urbanization driven by job opportunities, rising incomes and economic growth in cities; the growth includes migration of rural workers seeking better future¹. Buildings and construction is a priority sector globally linked to SDG 11 and the New Urban Agenda (NUA) wherein adequate housing is a key policy goal and commitment. This priority must be met in alignment with other SDGs, particularly SDG 12 and the Paris Agreement to mitigate the impacts of climate change.

Metal components form an important part of the buildings sector. These include carbon steel (as reinforcement bars, beams, angles, hollow structural sections, pipes), aluminium (as frames for windows, doors), copper and copper alloys (as pipes, tubes, cables, wires, bathroom fittings, door handles) and stainless steel (as roofing sheets, pipes). These components are manufactured in both large and Small and Medium Enterprises (SMEs); the latter contribute significantly to the economy in India and neighbouring countries in South Asia such as Bangladesh, Nepal and

Sri Lanka^{2,3}.

The efficient use of resources (energy, water, materials) and cleaner production (minimizing waste and reducing pollution) is of vital importance for such SMEs to remain competitive and sustainable. Growth in the infrastructure sector is one of the key drivers for the rising demand for metal products in India, which is also the world's second-largest producer of crude steel⁴. A significant fraction of metal products are produced by SMEs, accounting for instance, over 90% of steel re-rollers⁵. Energy efficiency enhancement in Indian re-rolling mills has been particularly emphasized with various interventions⁶. The situation is similar in other countries in South Asia. As per ADB², the metal and iron sector in Bangladesh has very high potential for energy savings. Light engineering and metal working are among the 11 booster sectors consisting of 31 clusters producing various building-related products. There are around 150 re-rolling mills with a total average output of 2.4 million t/year that mainly supply structural steel to the construction industry. Similarly, the metal sector in Nepal has potential for energy savings. Following the devastating earthquake in 2015, consequent reconstruction efforts has led to rising demand for metal products; besides, iron and steel products such as galvanized iron (GI) sheets, pipes and rolled iron bars are major export items^{7, 8}. The Sri Lankan construction industry is also booming accounting for 7.4% of Sri Lanka's GDP in 2019⁹. The metal sector here is facing increasing pressure on energy, material and water resources that are becoming scarcer and thus more expensive.

Despite their significance, metal SMEs in all these countries are often inefficient with resource-intensive production and generation of hazardous waste. Financial and technical capacities are inherently low and thus support is needed to achieve potential reduction in resource footprint. Furthermore, these challenges due to sub-optimal operation and disruptions in the supply chain have been further aggravated due to the COVID-19 pandemic. So far, the focus of the industry in South Asia has been on competitiveness due to cheap and abundant labour, favourable exchange rates, low interest rates and

concessional duty structure. Due to increasing pressure on resources such as energy and water, it is becoming clear that the economic edge of the region can be sustained only by ensuring high resource efficiency.

Resource Efficient Cleaner Production (RECP) application in metal sector

Resource Efficient Cleaner Production (RECP) approach applies enterprise-wide preventive environmental strategies to processes, products and services to increase efficiency and reduce risks to humans and the environment. For SMEs, an RECP-anchored sustainability approach is a cost-effective business strategy since it commences by improving processes, preferably using existing technologies to obtain “quick-wins”; high value capital investments are made subsequently, as required. RECP based interventions reduce resource consumption and waste generation thereby bringing down the operating costs. Paybacks for such interventions are usually within a year, the approaches can also be readily scaled-up to cover a wider range of processes or other industries in the sector. This was successfully demonstrated as part of two European Union co-funded projects coordinated by The Energy and Resources Institute (TERI) viz. ACIDLOOP10 (<https://www.switch-asia.eu/project/acidloop/>) and METABUILD11 (<https://www.switch-asia.eu/project/metabuild/>) wherein RECP measures were implemented in metal sector SMEs in India, Bangladesh, Nepal and Sri Lanka. The key achievements over the 4-year project period (2016-2020) for the more recent METABUILD project are summarized in Figure 1.



Figure 1: Summary of METABUILD project achievements (metal sector SMEs supplying to buildings and construction sector)

Overview of RECP interventions : This section provides examples of specific RECP interventions that

contributed towards the resource and monetary savings. Tables 1, 2 and 3 respectively highlight measures in energy, materials and water. Table 4 illustrates examples of measures requiring investment.

Table 1: RECP measures for energy savings

Process location &	RECP measure	Annual savings and payback
Electroplating unit, India	Surface of heated baths were covered by floating polypropylene balls; this minimized heat and water loss, besides reducing acid fumes thus improving the work environment.	Rs 1,00,000 from lower consumption of energy, water and chemicals 1 month
Fabrication unit, India	Reduction in set-pressure of compressor (from 12 kg/cm ² to 8 kg/cm ²) resulted in longer off-times of the compressor reducing energy consumption from 6 kWh per hour of operation to 2.25 kWh per hour of operation.	Rs 1,12,000 from reduced electricity consumption Immediate
Galvanising unit, Sri Lanka	Top surface of molten zinc bath was covered by a glass wool mounted steel frame, significantly reducing heat energy loss and improving workers comfort.	8,179 L furnace oil 1 month
Steel industry, Nepal	Temperature sensors were installed in re-heating furnace to avoid overheating; this reduced fuel consumption and furnace firing time.	29,700 kWh electricity & 34,850 L furnace oil 20 months
Sheet metal industry, Bangladesh	Steam from boiler was used to heat process tanks replacing burners below tanks; this reduced heat loss from tanks.	6686 m ³ natural gas 18 months

Table 2: RECP measures for material savings

Process location &	RECP measure	Annual savings and payback
Painting unit, India	Painting was done using high volume low pressure guns leading to reduced paint wastage and less thinner requirement for cleaning the painting booths; energy savings was also realized as high pressure compressed air was not required.	Rs. 1,60,000 from lower chemicals and energy consumption 0.9 month
Casting unit, India	Used resin coated sand employed in casting of brass parts was recycled by mixing with fresh sand resulting in reduced consumption of new sand.	Rs 2,95,000 from 10% lower fresh sand requirement Immediate
Powder coating unit, Sri Lanka	Copper rod was installed at powder coating booth to ensure adequate grounding of products; this resulted in improved powder adherence and lower wastage.	440 kg powder 2 months
Wire drawing unit, Nepal	Mechanical descaling was used instead of acid pickling for low carbon steel bars; this resulted in sufficient level of cleaning without acid use.	232,969 L acid 1 month
Bathroom fitting manufacturing unit, Bangladesh	Copper wires were replaced with re-usable, insulated jigs for holding parts to be electroplated preventing chemical reactions thus reducing chemical and copper wire loss.	1.8 kg nickel plating solution & 15 kg copper wire 11 months

Table 3: RECP measures for water savings











Process & location	RECP measure	Annual savings and payback
Electroplating unit, India	 A water cascading system with simple pipe fittings replaced individual rinsing tanks; this reduced both water consumption for rinsing and corresponding wastewater generation.	Rs 1,08,360 from lower water consumption 1.1 month
Electroplating unit, India	 Installation of a float based auto cut off for the overhead tank pump led to water savings as overflow was eliminated; also less spillage was directed to effluent treatment and energy was saved as the pump operated for less time.	36,000 L ground water Immediate
Cable manufacturing unit, Sri Lanka	 Condensate recovery system was installed to divert hot condensate water for boiler; this saved both fuel and fresh water.	230,000 L water & 3036 L furnace oil 2 months
Copper wire manufacturing unit, Bangladesh	 Drain-board was installed for pickling tank to carry-over acid back into tank; this reduced spillage and improved housekeeping.	1194 L water + acid solution 4 months
Cable manufacturing unit, Nepal	 Water pump was used to collect hot water from extrusion process; this collected water was cooled and reused, forming a closed loop.	3,000,000 L water 48 months

Table 4: High investment RECP measures

Process & location	RECP measure	Annual savings and payback
Manufacturing and plating unit, India	 Six existing reciprocating compressors (each 7.5 kW) operating 24X7 were replaced with a single 30 kW screw compressor resulting in significant electricity savings.	Rs 7,52,000 from electricity savings 9 months
Steel re-rolling industry, India	 Spent mixed (hydrofluoric, nitric and sulphuric) acids were treated by acid retardation; 70% of spent acid was recovered and reused in the pickling process.	Rs. 1,82,000 from reduced chemicals requirement Payback not determined (demonstration only)
Cable manufacturing unit, Sri Lanka	 A 104 kWp rooftop solar photovoltaic (PV) system was installed; excess electricity produced was sold to the national grid.	152,000 kWh electricity 54 months
Fabrication unit, Nepal	 Variable Frequency Drives (VFD) were installed allowing motor speed to be reduced rapidly while lowering energy consumption.	1,406,178 kWh electricity 9 months
Fan manufacturing unit, Bangladesh	 Gas based generator replaced existing diesel generator set.	234 tCO ₂ emissions reduced 11 months

Lessons learnt and the way forward : Both in India and in the neighbouring countries, creating awareness and building trust among the SMEs is an essential first step to RECP implementation. Proven examples of success, starting with low/no cost actions always highlighting the business case helps in convincing SMEs. It is important to listen to SMEs and local associations so their “pain points” are identified and addressed. Public-private partnerships can be set-up to support and sustain RECP implementation in clusters. Local availability of clean tech products (including maintenance and service) and financing to purchase the products as well as facilitating policy measures such as making audits mandatory can accelerate RECP acceptance. Finally, customer support is needed to adopt and continue implementation of RECP. For metal products in the construction sector, the role and perspective of builders and the personnel involved in material purchase is therefore crucial. Choosing to source products from resource efficient enterprises would contribute towards creating a greener supply chain – this policy can be emphasized in the company sustainability reports, thereby adding value to the brand. On a national level, it would help steer companies towards green procurement that is essential to meet India’s commitment to carbon neutrality by 2070.

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References

1. Sustainable Housing and Buildings, European Union Switch Asia SCP Facility, Retrieved 10.03.2021 from https://www.switch-asia.eu/site/assets/files/2785/informative_note_sustainable_housing_final.pdf
2. Asian Development Bank 2011. Industrial Energy Efficiency Finance Program (Bangladesh). Retrieved 24.02.2020 from: <https://www.adb.org/sites/default/files/project-document/60531/45916-01-ban-rrp.pdf>
3. Central Bank of Sri Lanka 2019. Roadmap for Sustainable Finance in Sri Lanka. Retrieved 24.02.2020 from: <https://www.cbsl.gov.lk/sites/default/files/Sri%20Lanka%20Sustainable%20Finance%20Roadmap%20FINAL%2008.04.19.pdf>

4. India Brand Equity Foundation 2022. Retrieved 09.05.2022 from: <https://www.ibef.org/industry/metals-and-mining-presentation>
5. Business Standard 2021. Retrieved 09.05.2022 from: https://www.business-standard.com/article/sme/steel-industry-to-rebound-strongly-but-msmes-may-trail-crisil-sme-tracker-121082900724_1.html
6. Ministry of Steel, Government of India. Retrieved 24.02.2020 from: <https://steel.gov.in/technicalwing/energy-and-environment-management-iron-steel-sector>
7. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH 2012. Verbesserung der Energieversorgung in Nepal. Retrieved 24.02.2020 from: <http://star-www.giz.de/cgi-bin/getfile/53616c7465645f5fc73f4185ed596423a932623a860d5a5d5cd6202ad249d6822edc66751fe9316783419110be4781497e2db76d30d2d5224d0b8a617a26f1af01140145ea2fa9c0/giz2012-0216de-nepal.pdf>
8. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH 2017. Background on Nepal Trade Integration Strategy. Retrieved 24.02.2020 from: http://www.tepc.gov.np/tepc_pub/2017_NTIS_Factsheet.pdf
9. Sri Lanka Ministry of Environment and Natural Resources 2018. Draft National Policy on Sustainable Consumption & Production for Sri Lanka. Retrieved 24.02.2020 from: <http://www.scp.mme.gov.lk/resources/5c3aec9d147862036.pdf>
10. ACIDLOOP Detailed Project Brochure, Retrieved 10.05.2022 from https://www.switch-asia.eu/site/assets/files/1559/brochure_acidloop.pdf
11. METABUILD Project Flagship Report, Retrieved 11.04.2022 from https://www.switch-asia.eu/site/assets/files/2278/metabuild_flagship_report_final.pdf



AS SUSTAINABILITY REPORTING KICKS IN, ESG INVESTING FACES GLOBAL CREDIBILITY RISK

GAURAV CHOUDHURY, CONSULTING EDITOR, NETWORK18.

Paul Clements-Hunt, who coined the acronym ESG, said that the ESG fund industry is headed for a 'shakeout' over the next five years

In two days' time, from April 1, new corporate governance rules as mandated by the Securities and Exchange Board of India (Sebi) will become operational. The top 1,000 companies ranked by market capitalisation will be required to include Business Responsibility and Sustainability Report (BRSR) in their annual reports. This, many experts see, as the precursor to formalisation of Environmental, Social and Governance (ESG) disclosures in India through a set of standard metrics.

The actions that corporations take for sustainability, and to protect the planet, is important for investors to understand corporate purpose, strategy, and management quality of companies.

From an investors' point of view, ESG rankings can be a useful way to hold companies accountable, and measure them on their sustainability actions and

efforts. That said, it may well be worthwhile to flag a caveat. How does one measure outcomes, and impact on a quantifiable scale that are not nationally, if not globally, standardised?

In the immediate context, ESG investments have also come into focus in wake of the ongoing Russia-Ukraine conflict where ESG funds, it now appears, were parked in Russian assets. According to reports, the portfolio of some of these investments included Russian State-backed energy giants, as well as bonds sold by Vladimir Putin's government. ESG funds also, reportedly, were deployed in 'negative stocks' such as coal, energy, and weapons, sectors that are generally perceived to be no-go areas for ESG investments.

Paul Clements-Hunt, who coined the acronym ESG, said that the ESG fund industry is headed for a "shakeout" over the next five years. He is of the view that the finance sector has "sprinkled ESG fairy dust" on products that do little to account for environmental, social and governance risks.

“Anybody who uses ESG, sustainability or green purely as a marketing device is really heading for trouble. You’ll see a developing queasiness from marketing departments where, perhaps, ESG funds aren’t all what they’re cracked up to be,” he said in an **interview to Bloomberg**.

Experts have been cautioning about the risks associated with opaqueness in ESG measurement. In an essay in the **Harvard Business Review** last year, Jennifer Howard-Grenville, Diageo Professor of Organization Studies, at the Cambridge Judge Business School, said that the “current focus on ESG measurement is dangerously narrow. It fails to capture the complex, systemic nature of social and environmental systems, and indeed that of business organizations themselves”.

ESG funds and their managers from across the world are gradually, but increasingly, showing signs of acknowledging that a more restrained approach may be required in ESG investing, which may also be partly drawn by disproportionately greater commissions that incentivises them to skew their portfolios towards such investments.

The key question for asset managers is: What are classified as ESG investment, and what are not?

A recent Schrodgers Institutional Investor Study, **‘Gearing up against greenwashers: investors seek clarity on sustainability terminology,’** has revealed that investors want a better understanding of sustainability terminology so as to avoid ‘greenwashers’. ‘Greenwashing’ happens when companies falsely communicate and make unsubstantiated claims about environmentally-friendly products, and processes.

“A dearth of clear, agreed sustainability definitions present a challenge to investors looking to invest sustainably”, it said. The study surveyed 650 institutional investors across 26 countries during April 2020.

Tariq Fancy, who was BlackRock’s first global chief investment officer for sustainable investing between 2018 and 2019, has also cautioned about the errors that are beginning to creep into these investments, guided by incomplete information, and interpretation.

“Green bonds, where companies raise debt for environmentally friendly uses, is one of the largest and fastest-growing categories in sustainable

investing, with a market size that has now passed \$1 trillion. In practice, it’s not totally clear if they create much positive environmental impact that would not have occurred otherwise,” Fancy said in a recent online essay.

This is because “most companies have a few qualifying green initiatives that they can raise green bonds to specifically fund while not increasing or altering their overall plans. And nothing stops them from pursuing decidedly non-green activities with their other sources of funding,” he added.

Financial institutions may have an extra motivation to push for ESG products, driven by higher fees that they earn.

According to data from **FactSet and published by the Wall Street Journal**, ESG funds had an average fee of 0.2 percent at the end of 2020, whereas other more standard baskets of stocks had fees of 0.14 percent. The Wall Street Journal said that “socially focused exchange-traded funds give asset managers higher fees in a low-fee industry.”

The lack of reliable and standardised data and metrics has opened up the precarious possibility of pitting one investors’ views against another, meaning one portfolio manager could classify a firm as ESG-friendly, while another might view the same firm as not doing much on sustainability efforts.

Sheila Patel, chair of Goldman Sachs Asset Management, underlined this with caution. “When you think about the composition of ESG funds it’s first of all important to remember they are still meant to be a fund invested to get a return for the portfolio. And so they can tilt based on industry groups, based on sector views and that may or may not relate to an ESG view,” Patel told CNBC.

There is no gainsaying that ESG investing today is big business. Trillions of dollars are at stake, based on the individual fund managers’ interpretation about companies. This can be fraught with risks as the absence of a standardised, transparent system of gauging sustainability efforts may allow fund managers’ biases to influence ESG investment decisions, rather than informed choices guided by prudent, globally accepted norms, and audit.

Source: **WWW.MONEYCONTROL.COM**



SUSTAINABILITY QUIZ

1. Rachel Carson authored a novel silent spring in 1962 on the environmental damages caused by the wide use of a chemical. The name of this chemical is
 - a) **Dichlorodiphenyltrichloroethane**
 - b) Endosulfan
 - c) Potassium cyanide
 - d) Carbamide
2. The maximum population size of a biological species that can be sustained by that specific environment is known as
 - a) Human index
 - b) **Carrying capacity**
 - c) Biotic potential
 - d) Environmental aspect
3. The time limit set by UN to deliver the Sustainable Development Goals is
 - a) 2025
 - b) 2040
 - c) **2030**
 - d) 2035
4. Brundtland definition of sustainable development has three pillars. These are
 - a) **People, planet and profits**
 - b) Product, profit and pollution
 - c) Pollution, poverty and planet
 - d) Prevention, preservation and practice
5. The Rule/Act that came into effect soon after Bhopal gas tragedy is
 - a) **The Environmental Protection Act**
 - b) The Air (prevention and control of pollution) Act
 - c) The Public Liability Insurance Act
 - d) The National Environmental Tribunal Act
6. They cycle nutrients coming from inland areas and serve as a buffer zone between the land and the sea. We are talking about
 - a) Coral Reefs
 - b) **Mangroves**
 - c) Estuaries
 - d) Rocky beaches
7. Approximately how many trees are to be cut to make one ton of paper
 - a) 5
 - b) 25
 - c) **15**
 - d) 40
8. Name the material once revolutionized the industrial world that has now become a serious environmental problem
 - a) Rubber
 - b) **Plastic**
 - c) Metal
 - d) Paper
9. The first airport in India completely energized by renewable energy sources is
 - a) **Cochin airport**
 - b) Bangalore airport
 - c) Delhi airport
 - d) Mumbai airport
10. The international treaty that was designed to control the transboundary movements of hazardous waste and their disposal is known as
 - a) Stockholm convention
 - b) **Basel convention**
 - c) Montreal protocol
 - d) Kyoto protocol

Logistics quiz answer

1. d
2. d
3. d
4. a
5. c
6. c
7. c
8. a
9. a
10. c

5 KEY FACTORS WHEN CHOOSING SUPPLIER SUSTAINABILITY MONITORING SOLUTION

In the face of ongoing and unprecedented disruption, supply chains are increasingly vulnerable to a wide range of sustainability risks that, if not managed effectively, can expose your company to increased operational costs, significant financial penalties and long-term reputational damage. As highlighted in our latest Barometer Report, companies that not only manage these risks but proactively drive sustainability throughout their supply chain are boosting revenue, deepening employee and customer loyalty, and helping transform their industries.

Although well-intentioned, the siloed efforts of many companies are leading to important aspects of supply chain sustainability being overlooked, suppliers either being underengaged or overburdened with requests, and efforts being duplicated. Leading procurement teams are finding that an integrated, holistic approach can help address many of these problems. A centralized supplier sustainability monitoring program can not only proactively identify risks but also help suppliers embark or progress on their sustainability improvement journey. While a number of solutions for building a more effective sustainable procurement program have emerged in recent years, not all are created equal.

Here are five key factors to consider when choosing a supplier sustainability monitoring solution for your business:

Factor 1: Does it enable you to navigate risks across a broad range of industries and regions?

No matter your industry, you will likely source across dozens or even hundreds of purchasing categories — including your indirect spend. Your company may know very little about the sustainability-related risks inherent to some of these industries and exposure can vary widely depending on their core business activities (e.g., labor risks in manufacturing, environmental risks in the chemical sector, ethical risks in extraction industries, etc.). Furthermore, each industry has its own regulatory landscape that can vary significantly by geography.

An effective solution should account for this complexity in how it assesses and monitors supplier sustainability performance. It should also offer tools that enable companies to prioritize supply chain risks and stay up to date with rapid regulatory changes impacting suppliers across a broad range of industries and countries. For example, EcoVadis IQ gives you the predictive intelligence you need to map ethical, social and environmental risks across your entire supply base, and prioritize where to focus engagement and monitoring efforts on higher-risk/higher-opportunity suppliers.

Factor 2: Does it cover a comprehensive range of sustainability topics in its assessment?

Although topics like carbon reduction have cemented their place atop the corporate agenda, the COVID-19 pandemic has reinforced the interconnectedness of sustainability issues and the need to tackle them holistically. While companies will inevitably focus on their most material issues, as defined by their business activities and operational locations, they must also consider the array of risks pervasive throughout their supply chains.

An effective sustainability monitoring solution will include criteria to assess these diverse risks — from modern slavery to anti-discrimination to product use and end-of-life practices. It should also align with the growing body of standards and initiatives that require or encourage companies to report on a broad spectrum of issues. For example, EcoVadis Ratings consider 21 sustainability criteria across four core themes — Environment, Labor & Human Rights, Ethics and Sustainable Procurement — to ensure that all risks are evaluated. It is aligned with leading standards, such as the Global Reporting Initiative, the United Nations Global Compact and ISO 26000 — and factors in over 500 sustainability-related regulations.

Factor 3: Does it facilitate universal comparison and provide actionable insights?

Supplier assessments alone are no longer enough. For assessment data to be useful for driving improvement on key sustainability topics, it must be

organized in a way that makes it digestible, comparable and actionable for procurement teams and suppliers alike. To effectively manage risk and identify opportunities, procurement teams must be able to answer the following questions: How is a supplier performing on sustainability topics in comparison to their peers? What is the norm for the industry or geography they are in? Are they improving their performance over time?

Solutions that quantify and benchmark sustainability performance (e.g., through ratings or scores) enable procurement teams – and their suppliers – to escape the “compliance trap” of making tenuous and sporadic improvements and leverage insights to drive meaningful and lasting impact. With the insights gained from benchmarking, buyers can set targets and thresholds that can be used to engage suppliers and help them take ownership of their performance. For example, the EcoVadis solution enables buyers to develop Corrective Action Plans in collaboration with their suppliers, track progress on these plans and ultimately recognize and reward those making significant improvements.

Factor 4: How easily can you integrate the supplier sustainability monitoring solution into your existing procurement processes?

To make sustainability central to your organization’s procurement function, you must be able to embed it within all procurement processes, including sourcing, onboarding, tenders and requests for proposals, supplier relationship management, contracting and annual reviews.

As the digital transformation of supply chains accelerates, the key to achieving this will be to find a solution that enables you to integrate key metrics and insights into existing supply management software suites. Ideally, the solution you choose will have a platform that comes integrated with leading enterprise resource planning software – such as SAP Ariba Risk Aware, Coupa Spend Management, Synertrade and Jaggaer – and other applications traditionally used for risk management to save time and costs.

Factor 5: What kind of services are available/ included for program and change management, onboarding, and facilitating supplier improvement?

Sustainable transformation is a journey. Even a world-class assessment and monitoring platform alone cannot singlehandedly transform most organizations’ approach to tackling sustainability risks throughout their supply chain. To deeply embed sustainability, organizations will also need to

transform their management processes, integrate new strategies and build the capacity of their suppliers.

Look for a solution provider that not only offers in-house program management expertise but also provides access to a network of peers that you can engage to refine your strategies around sustainability and connect with like-minded trading partners. Ideally, the solution you choose should have a supplier capacity-building platform like the EcoVadis Academy, which offers comprehensive e-learning courses to help suppliers navigate a wide range of challenging sustainability topics. Tapping into resources like this is crucial if your company wants to scale impact and unlock value throughout the supply chain.

Summary

There are a wide variety of approaches to sustainability and risk management. However, the most effective solution will give you the metrics and actionable insights you need to monitor and engage suppliers across industries and global regions. In addition to a dedicated online platform that you can leverage to compare supplier performance, identify opportunities and connect with new trading partners, you should be able to integrate these metrics and insights directly into your existing procurement processes. Ultimately, a sustainable procurement program can only be effective if there is buy in and ownership around it – ensure you choose a solution that enables you to build this both within your organization and among your suppliers.

For more insight on how the EcoVadis solution can help you build an effective sustainable procurement program, contact us for a consultation.

About the Author

EcoVadis is the world’s most trusted provider of business sustainability ratings, intelligence and collaborative performance improvement tools for global supply chains. Backed by a powerful technology platform and a global team of domain experts, EcoVadis’ easy-to-use and actionable sustainability scorecards provide detailed insight into environmental, social and ethical risks across 200+ purchasing categories and 160+ countries.

Source: EcoVadis



CONNECTED LOGISTICS IN SHIPPING: NEED OF THE HOUR

SANJAY BHATIA, CEO AND CO-FOUNDER FREIGHTWALLA

The pandemic led to massive disruptions in the past two years across the logistics sector. The crisis between Russia-Ukraine and Sri Lanka's economic situation has added to India's global supply chain system and other countries. These incidences reveal the disintegrated nature of the shipping industry worldwide. Rising complexities are significant grounds to address global supply chain issues.

Multiple factors lack the country behind in terms of the usage of intelligent machinery in the supply chain network. Due to inadequate awareness, the fragmented nature of local markets, insufficient government intervention and the absence of local organizations to strengthen regional standardization have created multiple hurdles in ensuring a seamless connected logistics network. Though the internet coverage in India is increasing at an impressive rate, the traditional company owners and exporters are still skeptical of breaking out of their comfort zones and adopting technology. Some of them might use the internet for inventory management and communication. However, advanced technologies like IoT are faraway topics for most of them.

Despite popular belief that IoT for logistics is making a significant breakthrough, mostly in wealthy countries, start-ups are making significant advances in this space in developing countries like India and are all set to getting an early mover advantage. It indicates that technology acts as a catalyst for the booming economic growth of start-ups. As logistics 4.0 is increasingly changing the logistical interface of India, having robust connected logistics penetration has become even more critical.

The worldwide connected logistics industry is expected to expand at a CAGR of 17.5% during the projected period (2021 – 2026). Increasing adoption of deep technologies like IoT, AI and ML in supply chain management will lead the connected logistics market to new heights soon. While the United States is leading in connected logistics penetration, the Asia Pacific region and India are the fastest-growing economies adopting technology-driven logistics.

Logistics departments must account for the problems of restricted procurement space, increasing exponentially while integrating predictive analytics into their plans to accommodate unanticipated delays and interruptions. It is just one instance of how intelligent logistics help firms optimize and grow, and this approach has several additional advantages. According to a McKinsey report published in 2018, organizations might increase their economic value by up to \$2 trillion by implementing AI-driven logistics solutions for their operations.

Smart and connectivity-driven applications have made the freight movement process easier for exporters worldwide. Although there is an aggressive need to create awareness about the new-age connected technologies, early signs of adoption can be seen in the EXIM ecosystem. Shippers are now starting to use AI and IoT to make their international freight and long-distance delivery procedures more frictionless. As you may be aware, exporters have several objectives for developing supply chain optimization plans. If you're a shipper, you'll want to choose the most cost-effective

transportation choices for your exports. Concurrently, you don't want to waste excessive money or time. This is when the role of a digital freight forwarder using the latest tech comes into play. Organizations may gather enormous volumes of data during the shipping and transit process by incorporating technologies such as RFID (Radio Frequency Identification) chips and Internet of Things (IoT) devices. These can be part of carriage trucks, containers, and other vehicles, allowing the exporter to know all the details about the current stature, potential threat, ETA, etc. Connected logistics also help businesses scale by planning massive orders and shipments well in advance and executing them effortlessly.

There have been several benefits that the EXIM industry can relish with the usage of such intelligent mechanisms. Apart from freight tracking, companies also need to monitor the inventory. Raw materials or finished goods in a facility can be vulnerable to damage, theft or misplacement. Organizations must also keep track of the inventory in their warehouses and freight tracking. Theft, misplacement, or damage to raw materials or finished commodities in a factory are possibilities.

It can lead to delayed production times, deliveries, and ultimately losses for organizations. Additionally, Inventory monitoring systems ensure that the company administrators are constantly aware of the quantity of stock in the warehouse. So, if your organization incurs stock losses during storage or transit, advanced tracking and monitoring systems will have you covered.

One prominent utilization can be predictive analysis. A component of AI provides the data necessary to make such long-term decisions. Using new techs like machine learning, data mining and predictive modelling, and predictive analysis systems can help the decision-makers in an organization understand the current state of the market at any point in time. Predictive analysis systems have one of the broadest range of applications for organizations.

Firstly, such systems can analyze customer behavior by scanning through records of their purchase preferences (regarding product lines) over several years. Further, based on behavioral data, the systems can direct organizations to produce high-demand products more and deploy their resources in operations that may yield profits in the future. After understanding all these essential components to ensure a proper and scalable export mechanism, IoT driven connect logistics is no longer a luxury but has become necessary for all businesses.

Today, the EXIM industry constantly seeks ways to acquire a competitive advantage. If these companies implement IoT and other similar technologies into their daily operations, they will undoubtedly achieve market domination. The use of intelligent shipping planning can provide enormous economic benefits for India. The necessity for merchants and organizations to invest more in technical infrastructure and adopt intelligent shipping as the new standard is clear.

Source: The Times of India, May 7, 2022

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INDIA SHOULD FOCUS ON GREEN PROCUREMENT STRATEGY: SUDHIR ZUTSHI

SUDHIR ZUTSHI
UL DIRECTOR POLICY, SOUTH ASIA

GPP brings about the most efficient use of resources ensuring organizations that adopt such a policy procure only the necessary products

At a time when government pushes for digital innovation to procure farm produce through its e-Marketplace initiative for better transparency and faster execution, Global safety certification company UL, which also delivers business solutions and conducts independent research and shares scientific knowledge, talks about 'Green Public Procurement' policy, a mix of both technology and transparency, that can revolutionise the future of procurement in India. **Sudhir Zutshi**, UL director policy, South Asia tells **Ajay Kumar Shukla** how the Green Public Procurement (GPP) policy implementation can positively affect all aspects of the triple bottom line – people, planet and profit.

How do you see the government's e-Marketplace initiative? How can the digital programme help in streamlining the procurement process going forward?

The Government of India took giant strides when it launched the Government e-Marketplace (GeM) in 2016 to transition its procurement to digital thereby making it cashless, paperless and contactless. Today, the government of India, its various departments, most state governments, their departments, public sector undertakings can save time, resources and money, bring in transparency, discover and standardize specifications for products and services through GeM. While the platform will continue to scale and improve efficiencies, the cogent next step would be

Green Public Procurement (GPP).

What is Green Public Procurement?

Green Public Procurement (GPP) describes a range of policies that ensure environmental considerations are included in the procurement process of the national and state governments. If done correctly, it can also positively affect all aspects of the triple bottom line – people, planet and profit. Most environmental and health concerns are influenced by the products we buy, and the way services are delivered. It is an effective process for tackling several of these concerns through the purchasing process. For the past few decades, governments around the world including the European Commission are leveraging GPP.

What does adoption of GPP policy bring to India?

GPP brings about the most efficient use of resources ensuring organizations that adopt such a policy procure only the necessary products. To give an example, the city of Tübingen in Germany saved Euro 30,000 (approximately Rs 23 lakh) per year by centralising cleaning product and service procurement that called for innovative and green products. There are many such examples across the globe.

Why should India embrace GPP and what advantages does it bring?

A green procurement strategy leads to a reduction in consumption of resources, utilities and energy, avoids waste and

emissions, protects human health and biodiversity, increases the transparency of costs and fosters innovation. It ensures fair working conditions and income while creating green jobs in the supply chain.

With India's commitment to SDG's, GPP would be an important step amongst other key initiatives in this direction to demonstrate India's efforts and focus in meeting the sustainability goals and targets. Further, considering the perpetual concerns over pilferage in procurement, it will create benchmarks for analysis and monitoring of procurement and provide a view into easily identifiable areas of improvement. The key is a structured roadmap to shift towards such a policy.

What is the future roadmap for GPP policy?

With the government and the National Green Tribunal (NGT) focusing on environmental well-being, a GPP policy should be transparent in terms of the scope of procurement activities it will cover and mechanisms for monitoring compliance and outcomes. Officials should be given adequate time to consider the impact of the changes and identify any specific steps that need to be taken on their part. Wherever possible, it is advisable to discuss the criteria with existing and potential suppliers in advance of use in tenders, as part of a pre-procurement consultation exercise or a technical dialogue. Above all, GPP should go hand in hand with eco-innovation policies aimed at stimulating market demand.

What will be the framework for implementation of GPP policy?

A framework for implementing such a policy will be helpful and should comprise the following:

Defining priorities and setting targets – Starting with certain checkmark purchase concepts, such as the amount of recycled content in paper or ECOLOGO certified

cleaning products, can get Governmental agencies, purchasers, industries and communities comfortable with the concept while having clearly defined and measurable goals. The focus could be to start with those sectors where GPP can be implemented easily and show the concept can work

Developing procedures and action plans – An action plan commits to several predefined actions, actors, tools, resources, budgets, expected results and implementation timeline

Monitoring implementation – To drive continuous improvement and effectively target the lifecycle environmental impact and costs of goods and services purchased, the Government should create a comprehensive monitoring system

Reviewing the outcomes – Along with progress, Government agencies in charge of the implementation should explain the challenges associated with the process. A continuous process of feedback from stakeholders is the best way to review the policy

How can the programme help Indian manufacturers?

Leveraging existing established programmes already used on a global basis allows Indian manufacturers to export to the world and provides a consistent level of performance that some may already be employing. The GPP policy can provide a testing ground for manufacturers to improve the environmental performance of products and thus ensuring compliance to robust global standards and conformity assessment framework which may become mandatory in the future.

Source: government.economictimes.indiatimes.com/electronicsb2b



INFORMATION TECHNOLOGY LEADING PATH OF INDIAN MSMEs TO MARCH AS CHAMPIONS

- Technology is very diverse in its forms; one of its branches is Information Technology (IT), which acts as a boon for MSMEs. IT has a great impact on all aspects of life and it is transforming the global economy in terms of ways of doing business. IT has a huge impact on most industries and usage of these technologies is reforming the rules of business, leading to the structural transformation of enterprises and businesses. Use of correct technology for businesses can lead enterprises touch sky-high successes, as accurately stated by Prime Minister Narendra Modi, "I see technology as a means to empower and as a tool that bridges the distance between hope and opportunity".
- Information Technology plays an essential role in escalating the profitability of the organizations. It also gives rise to competitiveness among the Small and Medium Enterprises (SMEs) making them think about the research and development along with the availability of the latest technology. IT is a mechanism, which enables SMEs to respond to customers' complaints and requirements efficiently by enabling information to be transmitted through various mediums including emails, telephonic, and social media channels. Enterprises can use various platforms of IT services for learning, marketing and advertising, selling their products and services, as well as trading, among various other uses of this technology.
- The potential benefits of Information Technology to Micro, Small and Medium Enterprises (MSMEs) are variedly known. It can enhance MSMEs' efficiency, reduce costs and expand market reach, at domestic and international level. As the MSME sector plays an important role in the Nation's economy, the sector benefits individual MSMEs collectively rendering into positive results, leading to employment creation, revenue generation and overall country's businesses competitiveness.
- It would not be wrong to say that majority of MSMEs hesitate to adopt the latest technology due to their lack of understanding and knowledge while selecting the correct technology solution for their enterprises, which affects their overall profitability. Such a situation is the result of a lack of skilled manpower to run high-tech machines and equipment, less trust in technology, and high capital investment for equipment. All these issues can be resolved by creating more awareness amongst MSME entrepreneurs and enterprises about benefits of technology adoption through trade bodies, as well as industry associations, helping them understand factors of transformation from conventional businesses to digitally active space.
- In the present business ecosystem, a majority of global entrepreneurs talk about adopting cutting edge technologies like Artificial Intelligence (AI), Machine Learning (ML), data-enabled systems, internet-based businesses, etc. to become more efficient, gain more trust from consumers and stand high over the

competitions. However, there is still a need for more for Indian MSMEs to transform their traditional and conventional method businesses into an updated and contemporary business. From small towns to metro cities, a lot of MSME entrepreneurs are harnessing technology to innovate their products and services, thereby giving a boost to their business and encourage slow MSME sector to grow faster. Though MSMEs may have been slow to technological adoption, they are now actively embracing technology to revamp old businesses and even start technology-based businesses such as e-commerce, online services, etc.

To widen the scope of Information technology, the Ministry of MSME has been actively working towards ways to facilitate MSMEs and assist them through all the stages in the business cycle. For ease of doing business, the Ministry has launched a robust Information and Communications Technology (ICT) based Internet Grievances Monitoring System portal called 'Champions' (www.champions.gov.in). The 'Champions' stands for Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength. The 'Champions' portal is a combination of technologies formed to help, guide, empower, ease and support the MSME sector of the country. Besides ICT tools incorporating telephone, internet and video conference, the system is enabled with Artificial Intelligence, Data Analytics and Machine Learning, to bring and tackle all grievances and suggestions under one-stop to help MSMEs. It is also fully integrated on a real-time basis with GOI's main grievances portal CPGRAMS and MSME Ministry's own other web-based mechanisms.

The Portal is packed with astonishing user-friendly features providing people with a fully integrated dashboard comprising organised data, the registration method is with OTP generation, for every grievance a new Complaint ID is created, different categories are available for users based on Association, MSME Unit, Would be Entrepreneur, etc. The Champion portal users can check all the grievances at one place on the dashboard as well as track the status of the same.

The Champions portal works on Hub and Spoke model comprising 66 State-level Control Rooms at offices of MSME- DI, BR MSME- DI offices, KVIC offices, NSIC offices, and Coir Board offices, which are impeccably connected with the Central Control Room at the Ministry of MSME, Delhi. The portal aims to help MSMEs in the present difficult situation due to COVID-19 lockdown as well as support them in future in terms of finance, raw materials, labour, regulatory permissions, etc. The system encourages MSMEs to capture new opportunities, as well as identifies potential MSMEs, who can become National and International Champions. The motto of the Champions portal is to solve problems of the MSME sector in the short run and create them as National and International Champions in the long run.

Source : msme.gov.in

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IS 2022 THE YEAR WHEN INDIAN BRANDS WILL GET MORE SERIOUS ABOUT SUSTAINABILITY?

KARUNA SHARMA

During the pandemic, brands like WOW Skin Science, Diageo and Dettol launched eco-friendly packaging to test the waters.

- After the global pandemic, sustainability and health seem to have become important factors for consumers.
- According to Capgemini's recent report, consumers engage more readily with brands and retailers that they perceive to be sustainable and genuinely committed to green practices.
- The report found that 48% of consumers share an emotional connection with products or organizations that demonstrate eco-friendly qualities.
- As we move forward this year and health concerns and sustainability continue influencing consumer decisions, we speak to brands, research and design agencies about how brands can integrate sustainability into their core values and move beyond mere lip-service.

It might be a new year but the world continues to grapple with familiar challenges and threats: we are on the verge of entering the third wave of COVID-19, the country's capital, New Delhi is currently facing alarmingly high levels of indoor air pollution and Uttarakhand's forest fires emitted nearly 0.2 megatonnes of carbon in the past one month, a record since 2003 (CAMS report). So 2022 will clearly be a busy year for brands as consumers get more serious about climate change and expect brands to increase their focus on living sustainably in harmony with nature.

While businesses exist to make money, Manish Chowdhary, Co-CEO, Body Cupid Pvt Limited says that there are two ways to do that. He explained, "One is sustainable, by keeping other living and non-living things in mind. The other one is inspired by greed.

So no matter how small a brand's effort may be, it has to be aligned with sustainability if the brand wants to continue in the long run. Brands exist for consumers and it is important that we listen to what they want."

From driving workforce diversity to taking a stand on climate change, there's a definite change that has taken place in consumer expectations. In the last few years, sustainability has become one of the biggest decision-making factors for consumers, and more so after the pandemic. They have realised that mother earth has suffered enough.

In this digital world, consumers are demanding more transparency and are quick to call out greenwashing. They are expecting to see concrete actions. And as Chowdhary said, it has become imperative for brands to listen to what consumers want because they exist to serve consumers.

Today's consumers are not only pivoting towards more sustainable products but are also willing to pay a premium for them. Gen Z and Millennials lead all other age groups in this respect. When shopping for groceries, 72% of Gen Z and 66% of Millennials say they are willing to pay more for organic foods and in fact, did so the last time they were grocery shopping, compared to 56% of Boomers, found Capgemini. Its recent report said that 80% of consumers want to contribute to the fight to save the planet for future generations.

And it is not just a phase. 70% of consumers agreed that post-pandemic, they will be more careful in terms of maintaining and protecting their personal health. Covid has only reminded us that there is a long way to go on sustainability.

On how the pandemic has altered consumer behaviour, Lulu Raghavan, Managing Director, Landor and Fitch said, "The pandemic has fundamentally shifted consumer behaviour. An IBM

study shows that 93% of consumers have changed their views on sustainability after the pandemic. This is totally understandable. The horrid virus which came out of nowhere has ravaged lives, ruined livelihoods. The only silver lining is that it has woken us up to the paramount importance of our own health and wellbeing and that of our Mother Earth. Sustainability is now a definitive transformative force that will upend existing industries and create new ones. If digital transformation was the buzzword in corporate boardrooms, ECG will take centre stage in the coming decade.”

But what exactly is a sustainable brand? Ashwini Deshpande, Co-Founder and Director, Elephant Design defines it as, “A brand that values ethical sourcing and supply chains, is inclusive, and follows environment-friendly processes and materials while staying viable for its stakeholders is qualified to be labelled as a sustainable brand.”

Kartik Johari, VP, Marketing & Commerce, Nobel Hygiene believes that in the coming months, people will start to question what is sustainable and what is not along with how we can continue to reduce our carbon footprint across all aspects of our lives.

He said, “Consumers at the end of it are people and they expect what is good. The ‘brand promise’ is essential to them. Now, alongside they are also making space for the environment due to excellent work by activists and journalists around the world. You will remember, for example, that riveting photo of a straw stuck in a turtle’s nose. How many millions of turtles have we lost to this? Yet it took just that one photo to break through the global psyche. Now straws are the Number One environmental enemy. But this does not mean the onus should be entirely on people to choose better! Companies have to improve their offering. And that is correct for consumers to expect. Moreover, important to note, there are some 50 or 60 companies in the world, which are responsible for majority of emissions. Strong regulations on them can solve what collectively 500 million people may have to do. But who’s going to bell the cat? As Mr Musk rightly has been saying that, give the solar industry the same amount of subsidies, for a year, that you give to oil and gas, and see the amount of transformative change it brings! The onus cannot be on that one little end consumer and their war to save their environment.”

During the pandemic, brands like WOW Skin Science, Diageo and Dettol launched eco-friendly packaging to test the waters, indicating that more brands in India have started reevaluating their packaging strategy to put the environment first. Big FMCG companies such as Marico, HUL, Nestle India, Future Consumer, Coca-Cola, Pepsi-co, Parle Agro also announced in 2020 that they will move to 100% recyclable packaging by 2025 helping towards a sustainable future.

Joining the bandwagon, the Indian Government has also started its efforts towards reducing our country’s carbon footprint. Currently, India is the world’s third-largest emitter of carbon dioxide, after the US and China. According to an ASSOCHAM and PwC report, landfills are brimming with so much urban waste that by 2050, India is reportedly going to need a landfill that’s the size of its capital, New Delhi. And consumers aren’t ignoring these horrifying numbers anymore.

Elysha Young, Trends Manager, Mintel APAC said, “India’s Prime Minister has pledged it will reach net-zero carbon emissions by 2070, backed by aggressive 2030 targets. By laying the groundwork in the form of policies, India is signaling that it is open and willing to support innovation around sustainability, and indeed that carbon-emitting industries will no longer be tolerated. This presents an opportunity for global companies looking to tap into India’s vast population but also issues a challenge to foreign and domestic companies to ensure they are cutting emissions throughout their value chain. It’s in India’s self-interest to stem global warming, with the nation of 1.3 billion people being one of the most vulnerable to the impacts of climate change. The nature of the short-term targets means that action will need to be taken immediately, which will see a strong focus on renewable energy sources like solar and wind power, as well as the batteries needed to store such energy. Companies would do well to look at the emissions within their own value chains and determine where cuts can be made. Communicating these to consumers will help them to make choices that align with the national strategy; the opportunity exists to ensure consumers feel like they’re also doing their bit.”

In 2022, brands that snooze will definitely lose

More and more consumers are becoming aware of

their choices and realising that whether it is a worn-out piece of mask they decide to throw or a sanitary napkin or even as simple as a plain t-shirt, never really goes 'away.' It all ends up in a landfill. Human activities are clearly harming the global environment and brands have no choice but to migrate to sustainable solutions and work towards building a circular economy.

So, in 2022, if brands don't switch, they lose consumers, investors, and all stakeholders.

Chowdhary said, "At the industry level, there is nothing without sustainability. The consumers of today are conscious and aware. They know the choices they are making. So if companies & brands do not opt for sustainable practices, eventually the smart consumers are going to make a switch. We can only expect the awareness to grow and actions to increase, especially with the challenges that our planet is facing today."

Anjali Malthankar, National Strategy Director, Tonic Worldwide sees sustainability as one of the big topics in 2022 – right from fashion, green products, green living to electric vehicles, every category will be touched by sustainability filter.

She said, "If the brands have already not made sustainability part of their commitment in any form yet, it's high time they join the eco-wakening movement. Consumers are already looking for some form of reassurance or the other from brands in terms of conscious behaviour, as consumers are at different stages of adoption – it is a mix of curious, concerned, and advocates. At the very least, they are looking to not feel guilty about consuming the brand. Conscious living, mindful living, Green living, purposeful living are all the buzz words in communications today. For brands it is inevitable to have sustainability as a larger goal."

It is not just the environment and consumers who benefit from eco-friendly practices, businesses with low carbon footprints are more likely to have a better brand image and can easily woo consumers.

Deep Bajaj, CEO & Co-Founder, Sirona Hygiene said, "Companies are realizing that being conscious of their environmental impact can benefit them in every manner possible. Consumers desire sustainability owing to the ailing earth. Companies that work to

become more environmentally responsible, not only contribute to a better future, but also establish a progressive brand image, happier employees, and a loyal client base. Consumers are real people who are affected by real environmental issues on a daily basis. They are aware that it is no longer limited to textbooks and that industrial activities have a direct impact on their daily lives. As a result, what goes into the making of a product and what goes inside it is extremely important to them. Other than environmental consciousness, they expect transparency from brands."

While brands in India have already started taking baby steps towards converting their business into a sustainable choice for consumers, we will get to witness more demonstrable actions in 2022. And those who fail to prioritise mother earth, will have to face consumers' wrath.

Deshpande said, "The emerging consumer base of millennials & Gen Z is not a forgiving lot when it comes to ethics or ecology being compromised by a brand. But others are not quite as aware and may base their decision only on factors like price or convenience above sustainability.

There is no choice. It is a survival mandate for a brand to become sustainable. Otherwise, we will see every resource being depleted in the next few decades."

Kantar BrandZ data shows that brands with weak purpose grow 70% but brands with strong purpose grow 175%. At the same time, India is still a price-sensitive country and consumers stick to the convenience of buying what you are used to.

So, on how brands can move beyond mere lip-service and greenwashing this year, Raghvan suggested, "Use innovation to develop products developed against that purpose. Embrace design thinking across the board. Embed a new mindset deeply in the culture and transform from within. Communicate and evangelise with consumers."

In 2022, experts are confident that brands will embrace sustainability that will benefit people, planet and profit.

Source: www.businessinsider.in



MINISTRY OF COMMERCE & INDUSTRY

NEW PRODUCT CATEGORY OF GREEN ROOM AIR CONDITIONERS LAUNCHED ON GOVERNMENT E-MARKETPLACE (GEM) TO MARK THE WORLD ENVIRONMENT DAY

Today on the occasion of World Environment Day, a new product category of Green Room Air Conditioners was launched on the Government e-Marketplace (GeM). The Secretary, Department of Commerce, Shri Anup Wadhavan launched it. The launch event was organized in association with United Nations Environment Programme (UNEP).

Shri Anup Wadhavan said on the occasion that Public procurement spend in India is nearly 15-20% of its GDP. Introducing SPP to this huge quantum of government procurement will further complement the country's climate policy objectives. The addition of Green Room Air Conditioners on GeM is another example of GeM being a futuristic and technology driven platform, focusing on environmental, social and economic pillars of sustainable public procurement

Shri P K Singh, CEO, GeM, said, "We have Gross Merchandise Value of about 15 billion dollars, with a little under 2 million sellers, and 52,000 government agencies, as buyers, and that is why it not only becomes critical but also urgent for GeM to facilitate the use of sustainable and eco-friendly procurement practices."

He further added, "We recognize the potential GeM has in nudging our government buyers to choose green and sustainable products and services, and the many positive externalities this can cause by driving innovations and reforming supply chains. This innovation can provide financial savings for government buyers and will meet evolving environmental challenges by moving towards a circular economy. We have also recommended to the UNEP to examine the top three services which have been procured by government agencies and how they can be made more sustainable."

The GeM portal will enable and encourage all central and state government agencies to buy efficient and environment friendly green ACs, thereby paving a way for Sustainable Public Procurement in India. The purchase of Green RACs shall be a voluntary approach.

Last year, the GeM portal saw sales of over 44,000 air conditioners worth Rs 1.7 billion, and it continues to grow. Additionally, public procurement spend in India is estimated to be 15-20% of its GDP. Leveraging the procurement power and promoting sustainable public procurement that align with India's climate policies and priorities would play a key role in achieving India's Nationally Determined Contributions and its commitment towards relevant SDGs particularly SDG 12.7. Green Room Air Conditioner integration within the public procurement system is a catalyst for market transformation towards sustainable cooling.

The Government of India is taking proactive steps towards a circular and green economy. In March 2018, the Ministry of Finance constituted a Task Force on Sustainable Public Procurement. Additionally, the draft National Resource Efficiency Policy (2019) includes the agenda of Sustainable Public Procurement, that suggests establishing green procurement guidelines providing information on resource efficiency criteria to be used in the procurement processes for the prioritized products/service categories.

United Nations Environment Programme (UNEP) in collaboration with other partners is supporting the Sustainable Public Procurement (SPP) initiative of the Government of India with initial focus on three prioritized product categories including paper, disinfectant and Green Room Air Conditioners. Jigmet Takpa, Joint Secretary MoEFCC, stated, the launch of Green Room Air conditioners on the Government e-Marketplace is an appropriate celebration of World Environment Day as an urgent, substantive and transformative system to reverse the damage done to our ecosystem. SPP is a key element in attaining a wide range of goals in strategic spending and implementation as a policy instrument to support programmes in priority areas and formulating national sustainable development strategies.

Saurabh Kumar, Executive Vice Chairperson, EESL Group, said public procurement most of the times moves the market towards better efficiency. There is an enormous demand for air conditioners in government offices and departments and led by such demands, with awareness outreach campaigns, we as public policy proponents have a massive opportunity to transform the market. This is what has inspired EESL to start with a super-efficient AC programme, and we would be happy to partner with GeM to move this movement towards super efficiency.

Aaron Bishop, USAID Acting Deputy Mission Director, said, USAID is honored to support the Government of India's priorities and objectives in greening the supply chain. It is inspiring to see that GeM has taken a lead by integrating green room air conditioner criteria onto its platform. This pioneering effort will propel the market towards adopting and expanding these green and sustainable products and services.

Aul Bagai, UNEP Country Head, highlighted that UNEP aims to support the government in establishing business models and policies for accelerating sustainable consumption and production, including through resource-efficient and circular approaches and sustainable public procurement will be a key enabling tool in this direction.

Source: PIB



PROCUREMENT IS MISSING IN SUPPLY CHAIN SUSTAINABILITY

VERONICA H. VILLENA

Supply chain sustainability efforts are leaving out the procurement function. These efforts won't succeed unless the procurement function becomes central.

Dr. Veronica H. Villena is an assistant professor of supply chain and information systems in the Smeal Business School at Pennsylvania State University

General Motors faced bad publicity in August 2014 after an explosion at a tier-two supplier, Zhongrong Metal Products

Mattel experienced a campaign against its popular Barbie and Ken dolls, in which Greenpeace accused Asia Pulp & Paper, a Mattel tier-two supplier, of clear-cutting vast swaths of Indonesia's rain forest.

In both these cases, scandal happened far down in the supply chain. Major companies like GM and Mattel tend to work directly with their tier-one or primary suppliers; those suppliers in turn have relationships with a host of lower-tier suppliers.

But customers will hold the brand accountable when even lower-tier suppliers violate environmental and labor standards.

So, how can companies address sustainability issues in their supply chains? It's a tough challenge, with each tier often having hundreds of suppliers.

The solution: Sustainable supply chain efforts need to make the procurement function central, at every tier of a supply chain. My research shows that, ironically, sustainable supply chain efforts often engage almost every function **but** procurement.

Here's what I found, and how firms can do better.

I studied three sustainability leaders and their supply networks

I studied three multi-national companies (MNCs) and their supply networks. The MNCs were in the electronics, automotive, and pharmaceutical industries. All were members of the Dow Jones Sustainability Index and had made other sustainability-related commitments; I wanted to understand current best practice.

From 2013-2016, I conducted 131 interviews at the MNCs and their tier-one and lower-tier suppliers. I visited supplier factories in China, Mexico, Taiwan, and the United States. I also attended several industry conferences and gathered relevant documents. (More details on my research are here.)

Supply chain sustainability efforts use "cascading," industry standards, and 3 tools

Each of the MNCs had taken a popular approach to supply chain sustainability: having tier-one suppliers "cascade" sustainability requirements. In "cascading," the MNC requires tier-one suppliers to comply with its environmental and social requirements and expects those suppliers to use the same requirements with lower-tier suppliers.

To advance supply chain sustainability, the MNCs used three tools: assessment, training, and incentives. They aimed to apply these within the MNC and to all tiers of suppliers. Each MNC had also worked with its industry organization to promote industry-wide supplier sustainability standards.

All three supply networks had some areas of strength. In particular, the MNCs and a few tier-one suppliers had mastered their supplier sustainability assessments. The MNCs also provided environmental, health and safety (EH&S) training to their suppliers and implemented incentive programs such as supplier sustainability awards, preferred supplier programs, and

supplier learning groups.

However, these efforts largely missed the procurement function, and so impact fell short.

The procurement function has been overlooked in supply chain sustainability

In all three networks, sustainability efforts largely skipped over the procurement function.

Training and incentives: Procurement personnel in both the MNCs and in suppliers received little sustainability training and had no incentives to pursue sustainability.

Communicating sustainability mandates: In both tier-one and lower-tier suppliers, the procurement unit was not informed about MNCs' sustainability requirements.

Here's how supply chain sustainability efforts traveled from the MNC to suppliers:

- The MNCs procurement team met with the tier-one supplier's sales and marketing personnel to demand that the supplier comply with the MNC's sustainability requirements, such as CO2 emission reduction projects and overtime work limits.
- The tier-one supplier's sales/ marketing personnel then shared those requirements with their counterparts in operations, R&D, and EH&S — but, surprisingly, **not** with procurement personnel.
- As a result, tier-one suppliers' procurement staff didn't learn about MNCs' sustainability requirements and couldn't communicate those requirements to their own suppliers, much less enforce them.

When procurement is overlooked, sustainability suffers

MNC sustainability teams recognize the power that procurement personnel have over suppliers. One sustainability manager told me: "We simply do not have the leverage over my firm's suppliers. Procurement managers are in the front line — suppliers listen to them, not us! They are the ones who select suppliers and place a work order."

But in these three networks, procurement managers in tier-one and lower-tier suppliers were almost all unfamiliar with the MNCs' sustainability requirements. One told me, "We are not invited to the table when discussing our customer's sustainability requirements." Another said: "I don't really know [the MNC's] sustainability requirements. If my marketing counterpart receives such information, that doesn't flow to me."

Because incentives for procurement personnel are still based mainly on cost reduction and quality improvement, most procurement personnel still focus on these traditional targets. The 65 procurement personnel I interviewed told me that cost-saving is their top priority, followed by quality improvement and on-time delivery.

Ultimately, the MNC's sustainability requirements can't cascade throughout its supply network.

4 ways to make procurement central in supply chain sustainability

To make supply chains more sustainable, the procurement function needs to be central. My research suggests four ways to achieve that.

1. **MNC procurement should work with supplier procurement.** The MNC procurement unit needs to actively engage the supplier's procurement unit. For example, MNCs could invite suppliers' procurement personnel (along with EH&S personnel) to their sustainability training sessions.
2. **MNC functions should send a consistent message to suppliers.** MNC directors should promote collaboration among all functions that interact with first-tier and lower-tier suppliers. Connecting R&D, sustainability, and procurement is especially important. Suppliers must repeatedly hear that MNCs value economic, environmental and labor outcomes.
3. **MNCs should offer sustainability training and incentives to procurement personnel.** Procurement personnel need more sustainability training and proper incentives for supplier sustainability. Otherwise, they will continue to focus on cost, quality, and delivery goals.

4. **Procurement personnel should proactively engage with industry associations.** Procurement personnel should participate in the development and updating of industry-wide sustainability standards and training. Generally these efforts are led by industry associations. At these MNCs, sustainability teams lead involvement with industry associations. Procurement personnel can contribute expertise and come to see the industry-wide sustainability efforts as core to their work.



Companies can take a new approach to procurement

The three MNCs I studied made several changes based on this research's results:

- The **pharmaceutical MNC** required sustainability training for its procurement personnel and set common KPIs for sustainability, R&D, and procurement. It also increased connection with suppliers' procurement units, e.g. through a partnership linking procurement staff at tier-one and lower-tier suppliers with MNC procurement and risk management personnel.
- The **automotive MNC** made sustainability training mandatory for its procurement personnel. Its procurement staff have joined sustainability personnel in taking a prominent role in relevant industry associations oriented to improve supply chain sustainability.
- The electronics industry is known for constant cost-reduction pressures. But despite these pressures, the **electronics MNC** has worked with its network of suppliers to adopt some industry-wide sustainability initiatives (e.g., standardized audits and training). Its

procurement personnel have yet to get directly involved with the industry association.

The three MNCs are spreading their sustainability requirements to suppliers more effectively, while recognizing that this is a long-term project. I believe that all firms can follow their example: improving supply chain sustainability by putting the procurement function at the center.

About the Author

Veronica H. Villena is an assistant professor of supply chain and information systems in the Smeal Business School at Pennsylvania State University. Her research focuses on how companies engage their global supplier network to achieve economic, environmental, and social outcomes. She has won multiple awards and published work in a variety of prestigious journal. Dr. Villena's research papers can be accessed at https://www.researchgate.net/profile/Veronica_Villena. She serves as an Associate Editor for the Journal of Operations Management and as a Senior Editor for Production and Operations Management.

Before joining academia, Dr. Villena worked in several positions in manufacturing, purchasing, quality, and project management. Her experience as an auditor for SGS has enabled her to assess the process management of hundreds of multinational companies in various industries in Europe and Latin America.

Additional Resources on Procurement

Villena, V.H., & Gioia, D. 2020. A More Sustainable Supply Chain. Harvard Business Review

Villena, V. H., & Gioia, D. 2018. On the riskiness of lower-tier suppliers: Managing sustainability in supply networks. Journal of Operations Management 64,65-87.

NBS podcast: How Sustainable and Circular Procurement Can Take Off

NBS podcast: Advance Supply Chain Sustainability through Supplier Development

Source: nbs.net



SUSTAINABLE PROCUREMENT MAKES GOOD BUSINESS SENSE

FREDDIE PIERCE

Follow @WDMellaCopeland In this day and age companies have to look to being environmentally friendly in all aspects of their business and in doing so e...

In this day and age companies have to look to being environmentally friendly in all aspects of their business and in doing so ensure that it is not just the environment which will benefit.

To implement sustainable practices there needs to be a pay-off in terms of cutting costs, increasing product sale price, attracting more custom or better staff.

According to the awareness group Action Sustainability, between 60 and 80 percent of a company's total spend is likely to be on their supply chain. Sustainable procurement has therefore become an important part of client and contractor processes and procedures, in order to make their activities more environmentally friendly.

Making the move to become more sustainable has a wide range of incentives, whether it is to improve your brand reputation, establish a competitive advantage, or to bring your trading in line with environmental legislation. Some organisations also tackle their procurement objectives in order to promote resource efficiency or to increase standing in rankings like the Dow Jones Sustainability Index.

Whatever the driver, implementing sustainable procurement should always have positive final results for your businesses, whether it is to cut cost, increase product sale price, or to attract more custom or better talent through your brand reputation.

Ian Heptonshall, Director of Action Sustainability, believes that no business should make the move to sustainable procurement unless they can see a clear benefit.

"Ask that question: why do you want to be sustainable? The companies that want to be sustainable because they have a passion to be green alone can only take it so far, unless they've got board level buy-in to being sustainable, they won't be successful. The business needs to understand why it makes business sense to be sustainable. I believe that every business has a business case, you just need to identify it," he said.

To help companies implement sustainable procurement, Supply Chain Digital together with the Director of Action Sustainability Ian Heptonshall have come up with an easy eight-step plan to get started on the road to a more sustainable future.

1. **Work out why it would benefit you to become more sustainable**
 - a. Could you save costs by being more resource efficient?
 - b. Has new legislation made sustainability vital?
 - c. Could you increase your product price?
 - d. Do you need to improve your brand reputation?
2. **Make it viable – identify a policy you can put to the board**
 - a. You need to come up with sustainable procurement policy which will be signed off and sponsored by a director of your board.
 - b. To make it viable you need to understand about the whole **life costing** of the products you procure.
 - i. Is buying a cheaper alternative making it more expensive in the long term? (Think about the cost of disposal- will your product need to be put to landfill in

- c. Sustainable procurement also involves **adding value** to existing products –
 - i. Is something improved by using sustainable materials? Could you charge more for it?
3. **Develop a strategy which underpins the policy**
 - a. The first step of that strategy is to do a **risk assessment**
 - i. Understand what your sustainability impacts are (Carbon, Water, Waste, Ethical)
 - b. The next step is applying this to your business, getting everyone together (including those outside the procurement team) to understand what your sustainable impacts are.
 - c. **Heat map** those according to spend categories – water may not be an issue if you're talking about labour contracts, but ethical standards may not.
4. **Focus your time and effort where you can make a difference**
 - a. If your spending capability is small, we would advise you not to address a big area as you're not going to make a difference in that area.
5. **Engage with your supply chain.**
 - a. Look into the capability of current suppliers, and the possibility of others. Talk to people about whether or not they can meet your expectations.
6. **Set your measurements.**
 - a. Set how you are going to measure your progress and the impact you've had on your supply chain. You can get an external consultant to do this.
 - b. You shouldn't use a different measuring system to the one that you normally use. Build new information into existing supplier scorecards and relationship management systems. It has to be business as usual, so you're not asking your procurement team to do two jobs.
7. **Embed the new strategy into other aspects of the business.**
 - a. Consider the new wording which may be put into a request for quotations, what contract clauses you're going to put into your contracts so the supplier meets your sustainability objectives.
8. **Set Targets**
 - a. Set standards, targets and a goal for when these should be achieved by.
 - b. After this, continue to work with your suppliers to see how you can improve.

In these eight easy steps it is easy to identify and develop a strategy for the problem areas in your supply chain, something which Heptonshall believes is important to recognising the importance of procurement to business operations.

"Unless the procurement team is seen to be helping a business achieve its sustainability objectives, and the overarching objectives of the business, there's a danger of a procurement team being seen as a sort of back office function, just a buying function rather than being a strategic function that can really help the strategy of the business," he explained.

More and more companies need to recognize the true value of their procurement processes and the value that they can add to businesses.

Source: supplychaindigital.com

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THE EVIDENCE IS CLEAR: THE TIME FOR ACTION IS NOW. WE CAN HALVE EMISSIONS BY 2030.

GENEVA, Apr 4, 2022 – In 2010-2019 average annual global greenhouse gas emissions were at their highest levels in human history, but the rate of growth has slowed. Without immediate and deep emissions reductions across all sectors, limiting global warming to 1.5°C is beyond reach. However, there is increasing evidence of climate action, said scientists in the latest Intergovernmental Panel on Climate Change (IPCC) report released today. Since 2010, there have been sustained decreases of up to 85% in the costs of solar and wind energy, and batteries. An increasing range of policies and laws have enhanced energy efficiency, reduced rates of deforestation and accelerated the deployment of renewable energy.

“We are at a crossroads. The decisions we make now can secure a liveable future. We have the tools and know-how required to limit warming,” said IPCC Chair Hoesung Lee. “I am encouraged by climate action being taken in many countries. There are policies, regulations and market instruments that are proving effective. If these are scaled up and applied more widely and equitably, they can support deep emissions reductions and stimulate innovation.”

The Summary for Policymakers of the IPCC Working Group III report, Climate Change 2022: Mitigation of climate change was approved on April 4 2022, by 195 member governments of the IPCC, through a virtual approval session that started on March 21. It is the third instalment of the IPCC’s Sixth Assessment Report (AR6), which will be completed this year.

We have options in all sectors to at least halve emissions by 2030 : Limiting global warming will require major transitions in the energy sector. This will involve a substantial reduction in fossil fuel use, widespread electrification, improved energy efficiency, and use of alternative fuels (such as hydrogen). “Having the right policies, infrastructure and technology in place to enable changes to our lifestyles and behaviour can result in a 40-70% reduction in greenhouse gas emissions by 2050. This offers significant untapped potential,” said IPCC Working Group III Co-Chair Priyadarshi Shukla. “The

evidence also shows that these lifestyle changes can improve our health and wellbeing.”

Cities and other urban areas also offer significant opportunities for emissions reductions. These can be achieved through lower energy consumption (such as by creating compact, walkable cities), electrification of transport in combination with low-emission energy sources, and enhanced carbon uptake and storage using nature. There are options for established, rapidly growing and new cities. “We see examples of zero energy or zero-carbon buildings in almost all climates,” said IPCC Working Group III Co-Chair Jim Skea. “Action in this decade is critical to capture the mitigation potential of buildings.”

Reducing emissions in industry will involve using materials more efficiently, reusing and recycling products and minimising waste. For basic materials, including steel, building materials and chemicals, low-to zero-greenhouse gas production processes are at their pilot to near-commercial stage. This sector accounts for about a quarter of global emissions. Achieving net zero will be challenging and will require new production processes, low and zero emissions electricity, hydrogen, and, where necessary, carbon capture and storage.

Agriculture, forestry, and other land use can provide large-scale emissions reductions and also remove and store carbon dioxide at scale. However, land cannot compensate for delayed emissions reductions in other sectors. Response options can benefit biodiversity, help us adapt to climate change, and secure livelihoods, food and water, and wood supplies.

The next few years are critical : In the scenarios we assessed, limiting warming to around 1.5°C (2.7°F) requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by 43% by 2030; at the same time, methane would also need to be reduced by about a third. Even if we do this, it is almost inevitable that we will temporarily exceed this temperature threshold but could return to below it by the end of the century.

“It’s now or never, if we want to limit global warming to 1.5°C (2.7°F),” said Skea. “Without immediate and deep emissions reductions across all sectors, it will be impossible.” The global temperature will stabilise when carbon dioxide emissions reach net zero. For 1.5°C (2.7°F), this means achieving net zero carbon dioxide emissions globally in the early 2050s; for 2°C (3.6°F), it is in the early 2070s. This assessment shows that limiting warming to around 2°C (3.6°F) still requires global greenhouse gas emissions to peak before 2025 at the latest, and be reduced by a quarter by 2030.

Closing investment gaps : The report looks beyond technologies and demonstrates that while financial flows are a factor of three to six times lower than levels needed by 2030 to limit warming to below 2°C (3.6°F), there is sufficient global capital and liquidity to close investment gaps. However, it relies on clear signalling from governments and the international community, including a stronger alignment of public sector finance and policy. “Without taking into account the economic benefits of reduced adaptation costs or avoided climate impacts, global Gross Domestic Product (GDP) would be just a few percentage points lower in 2050 if we take the actions necessary to limit warming to 2°C (3.6°F) or below, compared to maintaining current policies,” said Shukla.

Achieving the Sustainable Development Goals : Accelerated and equitable climate action in mitigating and adapting to climate change impacts is critical to sustainable development. Some response options can absorb and store carbon and, at the same time, help communities limit the impacts associated with climate change. For example, in cities, networks of parks and open spaces, wetlands and urban agriculture can reduce flood risk and reduce heat-island effects.

Mitigation in industry can reduce environmental impacts and increase employment and business opportunities. Electrification with renewables and shifts in public transport can enhance health, employment, and equity.

“Climate change is the result of more than a century of unsustainable energy and land use, lifestyles and patterns of consumption and production,” said Skea. “This report shows how taking action now can move us towards a fairer, more sustainable world.”

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Notes for editors:

Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

The Working Group III report provides an updated global assessment of climate change mitigation progress and pledges, and examines the sources of global emissions. It explains developments in emission reduction and mitigation efforts, assessing the impact of national climate pledges in relation to long-term emissions goals.

Working Group III introduces several new components in its latest report: One is a new chapter on the social aspects of mitigation, which explores the ‘demand side’, i.e. what drives consumption and greenhouse gas emissions. This chapter is a partner to the sectoral chapters in the report, which explore the ‘supply side’ of climate change – what produces emissions. There is also a cross-sector chapter on mitigation options that cut across sectors, including carbon dioxide removal techniques. And there is a new chapter on innovation, technology development and transfer, which describes how a well-established innovation system at a national level, guided by well-designed policies, can contribute to mitigation, adaptation and achieving the sustainable development goals, while avoiding undesired consequences.

The Summary for Policymakers of the Working Group III contribution to the Sixth Assessment Report (AR6) as well as additional materials and information are available at <https://www.ipcc.ch/report/ar6/wg3/>

Note: Originally scheduled for release in July 2021, the report was delayed for several months by the COVID-19 pandemic, as work in the scientific community including the IPCC shifted online. This is the third time that the IPCC has conducted a virtual approval session for one of its reports.

AR6 Working Group III in numbers

278 authors from 65 countries

§ 36 – coordinating lead authors

§ 163 – lead authors
§ 38 – review editors plus
§ 354 – contributing authors

Over 18,000 cited references

A total of 59,212 expert and government review comments (First Order Draft 21,703; Second Order Draft 32,555; Final Government Distribution: 4, 954)

About the IPCC

The Intergovernmental Panel on Climate Change (IPCC) is the UN body for assessing the science related to climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide political leaders with periodic scientific assessments concerning climate change, its implications and risks, as well as to put forward adaptation and mitigation strategies. In the same year the UN General Assembly endorsed the action by the WMO and UNEP in jointly establishing the IPCC. It has 195 member states. Thousands of people from all over the world contribute to the work of the IPCC. For the assessment reports, experts volunteer their time as IPCC authors to assess the thousands of scientific papers published each year to provide a comprehensive summary of what is known about the drivers of climate change, its impacts and future risks, and how adaptation and mitigation can reduce those risks.

The IPCC has three working groups: Working Group I, dealing with the physical science basis of climate change; Working Group II, dealing with impacts, adaptation and vulnerability; and Working Group III, dealing with the mitigation of climate change. It also has a Task Force on National Greenhouse Gas Inventories that develops methodologies for measuring emissions and removals. IPCC assessments provide governments, at all levels, with scientific information that they can use to develop climate policies. IPCC assessments are a key input into the international negotiations to tackle climate change. IPCC reports are drafted and reviewed in several stages, thus guaranteeing objectivity and transparency.

About the Sixth Assessment Cycle

Comprehensive scientific assessment reports are published every 6 to 7 years; the latest, the Fifth Assessment Report, was completed in 2014 and

provided the main scientific input to the Paris Agreement.

At its 41st Session in February 2015, the IPCC decided to produce a Sixth Assessment Report (AR6). At its 42nd Session in October 2015 it elected a new Bureau that would oversee the work on this report and Special Reports to be produced in the assessment cycle. At its 43rd Session in April 2016, it decided to produce three Special Reports, a Methodology Report and AR6.

The Working Group I contribution to the Sixth Assessment Report Climate Change 2021: the Physical Science Basis was released on 9 August 2021. The Working Group II contribution, Climate Change 2022: Impacts, Adaptation and Vulnerability, was released on 28 February 2022.

The concluding Synthesis Report is due in autumn 2022.

The IPCC also publishes special reports on more specific issues between assessment reports.

Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5 degrees Celsius (2.7°F) above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty was launched in October 2018.

Climate Change and Land, an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems was launched in August 2019, and the Special Report on the Ocean and Cryosphere in a Changing Climate was released in September 2019.

In May 2019 the IPCC released the 2019 Refinement to the 2006 IPCC Guidelines on National Greenhouse Gas Inventories, an update to the methodology used by governments to estimate their greenhouse gas emissions and removals.

The website includes outreach materials including videos about the IPCC and video recordings from outreach events conducted as webinars or live-streamed events.

Source: IPCC



CPO DIALOGUE 22 APRIL 2022 AT HOTEL LE MERIDIAN JANPATH, NEW DELHI

The CPO Dialogue, started as a joint initiative by IIMM Mumbai branch and SAP Ariba, conducted Delhi edition on 22 April, 2022 at Hotel Le Meridian. The Delhi edition was in collaboration with the Delhi Branch.

This exclusive – only by invitation event – was attended by 20 CPOs from various organizations in and around Delhi.

Mr. Surender Deodhar, National Secretary Treasurer IIMM anchored the gathering.

Mr. H K Sharma, National President IIMM, in his speech underlined the importance of networking of Materials Management professionals. The covid pandemic has given a new direction in the thinking process of materials management/supply chain management professionals. He opined that the dialogue will give directions to the institute in designing and implementing its future course of actions.

Mr. Ashwani Narang, SAP Ariba in his presentation focused on the enhanced importance on sustainability, the disruption that is occurring in the supply chains, the increased move towards digitalization of supply chains, the increased need for resiliency in supply chains, the enlarged IT spending of organizations to take care of technological advancement in supply chains, the impact of increased cyber risks and its mitigation, the cloud centered procurement, etc. He also opined that the premium to be paid for environment friendly products is around 40%. He pointed out that out of the 17 SDGs declared by UN in 2015, 10 provides opportunity for contribution by procurement.

Mr. Bala Iyer, Convener - CPO Dialogues, Former National President of IIMM, CPO Deccan Chemicals, facilitated freewheeling discussions. In his opening talk Mr. Bala Iyer interacted with all the CPOs present and took their suggestions and inputs for furthering the CPO dialogue in future.

Mr. Sanjeev Bhatia, Vice President Indra Prashta Gas Ltd, had pointed out that the pandemic has increased the visibility and importance of the materials management.

Mr. Ram Kuppaswamy, Head Materials of Hero Motors Ltd has pointed out his companies helped tier 2 and tier 3 suppliers to speak up and helped them financially to tide over the Covid situation.

Sharing the experience by Mr. Vedant Vikram, CPO, BASF (Vegetable Seeds) explained how they improved their supply chain risks through visibility and prioritizing. During the pandemic period analysis was carried out on chemicals to extend their expiry period.

Mr. Pritiman Panigrahi, GM CNH Industrial India explained that for achieving sustainability in their supply chain they focused on creating a vast supplier base.

Mr. Devend Mishra, Jindal Steel and Power Ltd, shared his experience of leveraging cooptation to share raw materials with competitors, to run their plants during the pandemic period.

Mr. Somit Mukherjee from Dabur gave a quick glance into the way Dabur is using Data Analytics for predicting commodity prices with a high accuracy.

Mr. Ashish Gupta, GM, Mother Dairy shared his experience during Covid. With focus on digitalization and how they managed the supplier's payment on time.

Mr. Umag Bhatnagar, Senior VP, SRF Ltd speaking on sustainability explained that the best way to measure the environmental performance is the units of energy not used and units of water not used.

Mr. Ashok Rajput, Akzonobel, talked of recycled use of plastic to the extent of 30%.

Mr. Bala Iyer kept the entire discussion focused on facilitated inputs from all the CPOs.

Mr. Ravindra Sharma, Procurement Adoption Director, SAP, summed up the entire discussion blended with his experience and insights.

The programme concluded with a vote of thanks by Mr. Sanjay Shukla, Chairman Delhi branch.



BRANCH NEWS

ALWAR BRANCH

Indian Institute of Materials Management , Alwar Branch Conducted National Seminar along with annual day celebration on " Post Covid SCM and Its Impact on Indian Industries on 30/4/22 at Hotel RedFox , Bhiwadi dist. Alwar Rajasthan. About 65 Participants attended the seminar from various Industries from Pan India. The Participants from Alwar, Ahmedabad, Bangalore, Chandigarh, Mohali Delhi, Dehradun, Faridabad, Hyderabad, Jaipur, Mysore, Lucknow, Gurugram, Tirupati, and Vadodara participated in the seminar. Our Former National President Mr. S K Sharma and Lal Bhai Patel along with Mr. R K Rastogy and D N Trivedi senior members of IIMM were part of the seminar. From Vadodara there were six participants and four from Ahmedabad flour delegates took part.



The Branch Chairman Mr. Chandan Kathuria Welcomed the delegates and Mr. Lalit Raj Meena briefed the participants about History of IIMM, IIMM activities, education, training programs and consultancy services for the Industries.

Mr. Meena also briefed about formation of Alwar Branch in 2016 . The branch has the membership strength of 112 Members as on date with 87 Life Members.



The Seminar was Inaugurated By Sh. Shisram Tanwar an Industrialist and Mr. Rajesh Luthra Plant Head Eicher Engines was the Keynote speaker.

During the keynote speech Mr. Luthra mentioned the difficulties caused to Indian Industries and how the SCM team managed the supply to the industries without affecting the production . It was technology, AI and BlockChain technologies which came to the rescue of Indian industries

Mr. Jayant Chakraborty in his session discussed lean Manufacturing including world class manufacturing. The technical sessions were Chaired by Sh. Lal Bhai Patel .In the 3rd session we had an Interaction session coordinated by Mr. S K Sharma, former National President IIMM. The session was appreciated by one and all.



In the last session we had the Panel Discussion which was coordinated By. Sh. R K Rastogy from Mysore Branch , other panelist were Mr. Lal Bhai Patel , Rajesh Luthra, D N Trivedi and Sh. S K Sharma.

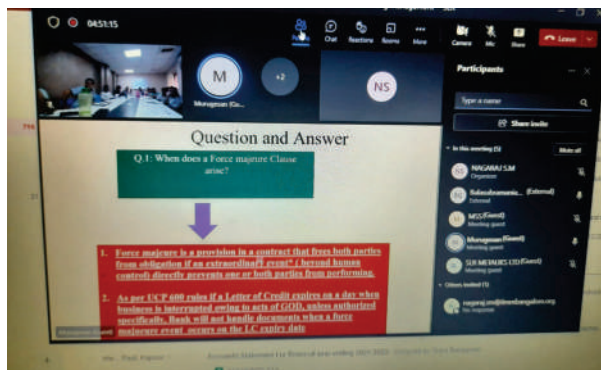
The Technical sessions and panel discussions were appreciated by one and all and there were request from delegats to have more such programs at Bhiwadi and other Industrial areas of the district.

Mr. Lalit Raj Meena Proposed vote of thanks with Special mention of Mr. Naresh Kumar Meena Fire Office Bhiwadi and Life member of Alwar for the assistance provided to the branch in organizing the program.

BANGLORE BRANCH

30.04.2022 and 7th May 2022 : IIMM Bangalore Branch has organised an Inhouse Training Program on “Legal & Commercial Aspect of Purchasing Management” for the executives of SLR Metaliks Private Limited, Hospet on 3rd April and 7th May 2022 on MS Team Application. Senior Faculty of IIMM Bangalore Branch handled the sessions. We received very good feedback from the participants and organisations.

20.05.2022 -Study Circle Meeting : IIMM Bangalore Branch has organized a Study Circle Meeting /Free webinar on “IoT Solutions with the Industry 4.0” on 20th May 2022 (Friday) from 6.30 pm to 7.30 pmon “IoT Solutions with Industry 4.0” Speakers **Mr. Nagarajan, Founder and CEO**, Wimera India and Singapore and **Mr. Seemaichamy MS (Quality Management)** Head of IOT Solution, Wimera India spoke on the subject and gave presentation on very innovative practical aspects of SCM 4.0and also gave demo onvalue added products. Session was very informative fact and figures shown in presentation was perfect.Received very good feed back from the participants and members.



ITP On Legal and Commercial Aspect of Purchasing for SLR Metaliks - Hospet

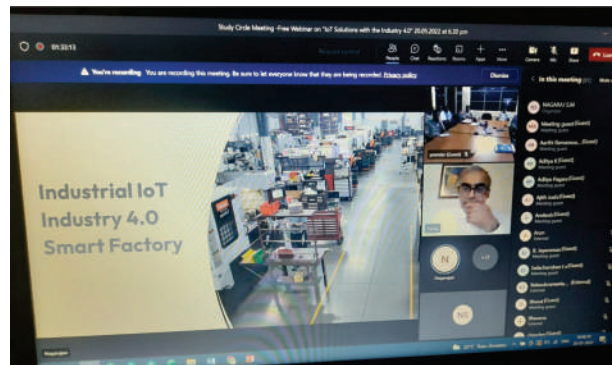


ITP on Negotiation - Participants involved in Business Game



ITP On Negotiation Strategy Faculty Mr. G. Balasubramanian Handling Session

20.05.2022 – Inhouse Training Program: IIMM Bangalore Branch organised an Inhouse Training Program on “Negotiation Strategy” for the executive of London Stock Exchange Group on 20th May 2022 at Mango Mist Resorts, Bangalore. Senior Faculty of IIMM Bangalore Handled session. ITP was very informative and Interactive. Very good feed back received from the Participants and organisations.



Study Circle Meeting on 20.05.2022 -Speaker Mr. Nagarajan, Founder & CEO giving presentation

COCHIN BRANCH

Materials Management Day was celebrated by IIMM Cochin Branch in a grand manner on 12th May 2022 in the Banquet Hall of Hotel Seapark, Cochin. The meeting was presided over by Branch Chairman Mr Jacob Mathew. The Chief Guest was Fr. Ephrem Thomas SJ, who is a renowned TA specialist & writer. His book titled “I’m OK, Not OK, Still OK” is a fast-selling volume on Self-development.

Chairman welcomed the gathering and informed the audience about the activities of IIMM on national level and at Branch level. Cochin Branch is meeting the State Industry Minister to submit a proposal on reviving ailing State Public Sector Undertakings through Consultancy work by IIMM experts. The Chief Guest lighted the traditional “Nilavilakku” and inaugurated the meeting. During his thought provoking & interesting speech, he stressed on the need of Officers practicing strict self-developmental exercises for excelling in professional matters. How Inter-personal relationship, mind control methods etc can make positive vibes in family and official matters were highlighted through his own experiences and research.

Past Chairmen Mr G R C Nair, Mr U Padmanabhan, Mr T A Roby & Course Co-Ordinator Dr David Morais were honored with mementos for their contributions to IIMM. Our student Mr Melvin Mathew Kolbe, who won President's Gold medal for PGDMM exam was honored during the meeting.

Felicitations were given by Dr Babu Jose, Chairman Indian Institute of Chemical Engineers, Cochin Branch & our EC member and Dr Jagathy Raj, Director, Cochin University School of Management Studies & our NC member. Melodious songs were sung by our Hon. Secretary Mr K S Shaji & our Office Manager Mr Babu Motilal. Our Vice Chairman Mr P V Paulson spoke on the occasion. Branch Treasurer Mr Thomas George was the MC for the meeting. Hon Secretary Mr K S Shaji proposed a vote of thanks. The audience numbering more than 50 comprised of members of IIMM with family, Industry representatives from various companies and students.

The meeting was followed with a sumptuous dinner.



Chief Guest Fr Ephrem Thomas presented with a memento by Branch Chairman Mr Jacob Mathew



Group photo of audience



Gold medal & memento presented to our student Mr Melvin Mathew Kolbe for first in PGDMM Course



Felicitation speech by Dr Babu Jose



Presidential address by Branch Chairman Mr Jacob Mathew

HYDERABAD BRANCH

IIMM, Hyderabad Branch has celebrated the Materials Management Day 2022 on 22nd May 2022 by its members including students and professionals from the various industries. More than 100 members were part of the Celebrations. Program held at Federation of Telangana Chambers of Commerce and Industry, FTCCI building, Hyderabad.

The Celebrations begun with the "Deepa Prajvalanam" (lighting of the lamp) by Chief Guest, Key note speaker and our Chairman, Vice Chairperson, NC members accompanied by and followed by the Prayer.



Then the event activities flown smoothly with the anchoring of Mr Shravan Kumar, EC Member.

Branch Chairman, Mr S Janardhan Rao had given the welcome address. NC Member, Mr P Mahendar Kumar enlightened the participants with the IIMM National Activities. Then, the Chief Guest, Mr Venugopal Uppalapati, CEO, Neovatic Technologies, had shared his experiences and his point of view in-line with the MM Day Theme. The Key Note Speaker, Mr Sri-Harsha Govardhana, MD, Sarvagya Solutions Pvt Ltd, delivered his speech on **“Risk and Resilience Management in Post Pandemic Supply Chain”**.



Program Cosponsors M/s. Cargomen Logistics, Mr. Kamal Jain & Dr GBRK Prasad , M/s V-Trans, Mr B Raghavendra Rao & Mr G Sunil Kumar and M/s Geofast Pvt Ltd, Mr Rahul Kumar Garg & Mr Mohd Shah Hussain & Mr K Phani Krishna spoke about the theme and their companys' experiences. Mementoes were presented to the Guests in the remembrance of the Celebrations.



The EC Team consisting of Chairman, Vice-Chairperson, Hon Secretary, NC Members, EC Members were present and put in all their team efforts in making this event a grand success.

Audience interacted with speakers during Q&A session, were very happy and they enjoyed the program. They conveyed their praise for the event. The Activities were concluded with the Summing up by Mr Giridhar Gorthy, EC Member and Vote of thanks by Mr KPC Rao, Hon. Secretary.

The program ended with the National Anthem by All the members, then proceeded for the Dinner.

KOLKATA BRANCH

“35TH ANNUAL CONVOCATION” OF IIMM KOLKATA FOR INSERTION IN “MATERIALS MANAGEMENT REVIEW”

Annual Convocation for awarding Graduate Diploma in Materials Management – GDMM, is monumental milestone for budding supply chain professionals. It is an accomplishment that deserves recognition and encouragement. It represents warm memories of the past and big dreams for the future. IIMM Kolkata could not organize Annual Convocation in 2020 and 2021 due to Covid -19 Pandemic.

When Covid -19 fear being wiped out, IIMM Kolkata Branch organized 35th Annual Convocation at ICCR Premises at Satyajit Ray Auditorium, Kolkata, on Friday, the 29th April, 2022. The programme was inaugurated with Lighting of auspicious lamp by the Chief Guest - Major General Dr. Sanjay Kapoor, VSM (Retd.), Deputy Director, Tata Medical Center, Kolkata; and the Special Guest of Honour - Mr. Rakesh Ranjan, Executive Director, Damodar Valley Corporation. Mr. Kaushik Mukherjee, Hony. Secretary, on behalf of IIMM Kolkata, welcomed Major General Dr. Sanay Kapoor, VSM,(Retd.), Mr. Rakesh Ranjan and others attendees. Mr. Koushik Roy, Chairman, IIMM Kolkata, in his formal welcome speech, welcomed the Chief Guest and Special Guest of Honour, dignitaries, guests, faculties, members of the Institute and students who attended the programme for receiving GDMM Diploma from the Convocation dais. Mr. Kallol Ghosh, Vice Chairman of IIMM Kolkata, took the chief role to manage the show in a befitting and decent way and made the entire Convocation Ceremony a memorable and dazzling one.





Major General Dr. Sanjay Kapoor, VSM (Retd.), Deputy Director, Tata Medical Center; and Mr. Rakesh Ranjan, Executive Director, Damodar Valley Corporation, were felicitated by the Chairman, on behalf of IIMM Kolkata. Mr. Debasis Mullick, Co-Chairman of the Education Sub-Committee & Course Co-ordinator, in his brief deliberation, highlighted various Courses including GDMM being imparted by IIMM and the significance of these courses in the wide domain of supply chain management in changing scenario. He wished the budding professionals who turned up for receiving GDMM Diplomas. Mr. Kallol Ghosh, Vice Chairman, introduced the Chief Guest and the Special Guest of Honour to the audiences. Mr. Rakesh Ranjan, in his address as the Special Guest of Honour, highlighted the crucial role being played by the supply chain professionals not only in industrial sector, but also in service sector, as well. According to him, during pandemic, the role of supply chain profession gains momentum in absence of conventional work-culture and digitizing in supply chain management to a great extent. He hailed the supply chain fraternity and IIMM for striving to excel in SCM and making it to be a distinct profession.

Major General Dr. Sanjay Kapoor, VSM (Retd.), Tata Medical Center, in his Convocation Address, motivated the budding professionals to scale to new heights in their profession and wished them a grand success with GDMM Diploma, which would certainly add value to their careers. His inspiring discourse was applauded by the members and particularly students.

On the Convocation Dias, Mr. Kallol Ghosh, Vice Chairman, announced that Shri Tapas Chakraborty, Senior Education Officer and Shri Sukumar Roy Chowdhury, Assistant Officer, would be awarded suitably in the next Annual General Meeting for their outstanding performance in further of all courses being run by IIMM Kolkata. According to the Vice Chairman, both the staff members were instrumental in organizing the 35th Annual Convocation in a glittering way. Mr. Kallol Ghosh also announced to felicitate Mr. Amit K Majumdar for his valued support and service to the cause of IIMM Kolkata and requested him to come to the dais. Mr. Majumdar was felicitated with a Shwall by Major General Dr. Sanjay Kapoor, VSM (Retd.).

A colourful Souvenir commemorating the 35th Annual Convocation was unveiled by the Chief Guest and the Special Guest of Honour. The Souvenir was distributed among attendees of the programme finally.

It was the final episode of the Convocation when Mr. Kaushik Mukherjee, Hony. Secretary, announced the names of successful students of GDMM R-57, R-58, R-59, R-60 and R-61 Batches to the dais for receiving GDMM Diploma. Major General Sanjay Kapoor, VSM (Retd.) and Mr. Rakesh Ranjan handed over GDMM Diplomas to them. Among the successful students the following were awarded Chairman's Gold Medal and Vice Chairman's Silver Medal of IIMM Kolkata Branch were awarded to winners.

Major General Sanjay Kapoor, VSM (Retd.) and Mr. Rakesh Ranjan handed over the medals also to the recipients.

Finally, Mr. Kallol Ghosh, Vice Chairman, offered vote of thanks and placed on record sincere thanks and gratitude to Major General Dr. Sanjay Kapoor, VSM (Retd), Deputy Director, Tata Medical Center' and Mr. Rakesh Ranjan, Executive Director, Damodar Valley Corporation, for gracing the 35th Annual Convocation and for their motivational speeches. Mr. Ghosh also placed on record sincere thanks to guests, dignitaries, faculties, members and students and their families who attend the programme. Finally he announced to join for Convocation Dinner.

LUCKNOW BRANCH

Seminar on "BIG CHALLENGES FOR SUPPLY CHAIN MANAGEMENT in 2022" was organized by IIMM Lucknow on 1st May'2022.



Seminar was inaugurated by Mr Ravi Prakash Chief Of Projects, Hindustan Aeronautics Limited and Mr H K Sharma, IIMM National President & Mr Ajeet Kumar, IIMM-Vice President (North) by lighting the lamp which was followed by Saraswati vandana by Shanti Kunj Haridwar. Chairman of IIMM Ludhiyana, Dehradun, New Delhi, Rai Bareilly & Kanpur branches also graced the occasion.

Mr Prashant Kumar Singh, Chairman-IIMM Lucknow branch welcomed all the dignitaries, eminent speakers

and members of the IIMM. In his welcome speech stated that challenges in current world scenario Supply Chain are very much dynamic in nature, therefore in order to understand the various challenges to be faced by Supply Chain Professionals, IIMM Lucknow branch has organized the seminar.



Chief Guest, Mr Ravi Prakash Chief Of Projects, Hindustan Aeronautics Limited Lucknow, in his opening key note emphasize the need for Supply Chain Professionals to use technology for anticipating the problems & challenges posed by COVID19 and ongoing Russia-Ukraine war. Mr Ravi Prakash a bronze medalist in GDMM(1986 batch), spoke about raw material shortages, consequent delays in supply of semiconductors, which resulted in delay in supply of products in various fields. Mr Prakash stressed that Supply Chain Professionals need to pull up their socks to convert the threat into opportunity.

IIMM National President, Mr H K Sharma spoke about the courses offered by IIMM. He also informed the audience that efforts are being made to revise the courses in line with the current trends and challenges faced by Supply Chain Professionals. Mr Sharma also emphasized the need to use AI and data analytics to get more realistic scenario of anticipated challenges in Supply Chain.

Mr H K Sharma also presented the IIMM National President appreciation medals to Mr Prashant Kumar Singh, Chairman-IIMM Lucknow, Mr P K Bajpai, Secretary IIMM Lucknow and Mr M L Mangal ex-Chairman-IIMM Lucknow for their contribution in IIMM Lucknow branch.

IIMM Vice President(North) Mr Ateet Kumar, introduced Chairman of various north IIMM branches and elaborated the work done by these branches in their area.

Eminent speakers at the seminar were Dr J V Vaishampayan, Ex-Vice Chancellor (Allahabad, Kanpur and Bundelkhand University), Prof Ashutosh Mohan, Management Studies, Banaras Hindu University, Mr J P Pandey, Special Director General-RDSO. Dr Vaishampayan spoke about the in Supply Chain Challenges in 2022. Prof Ashutosh Mohan spoke shown in-depth analysis of impact of COVID19 and Russia-Ukraine war on Supply Chain Management in 2022 and beyond. Mr J P Pandey gave presentations on problems expected by government Supply Chain Professionals.

Chairman of IIMM-Ludhiyana branch gave an inspirational speech and requested participants to be part of Green campaign launched by him.

Program was co-ordinated and conducted by Dr C M Mishra, Associate Professor, Indian Institute of Management Lucknow. The seminar was attended by more than 90 executives of various fields/organizations such as Tata Motors, HAL, Banks, students and working professionals.

NEW DELHI BRANCH

Indian Institute of Materials Management (IIMM) organized seminar on "Emerging Trends in Public Procurement" at Hotel 'The Park', New Delhi on 28th May 2022. Seminar was attended by about 125 delegates from all over India from Central Govt. and State Govt., Ministries, PSUs and representatives from industry connected with public procurement. Seminar started with welcome address by Sh. Sanjay Shukla, Delhi Branch Chairman.

Sh. Ram Prakash, Addl. Member, Railway Board and Chief Guest, threw light on importance of public procurement, role of Make in India program and use of technology like GeM in public procurement and changing face of public procurement in India. The value of public procurement in India accounts for approx. 15-20% of GDP. Further, government's push towards upgrading existing infrastructure coupled with scale

and magnitude of govt. projects has also resulted in an increased number of procurement opportunities as is evident from “Digital India and Make in India” initiatives, which aims for greater participation in Public Procurement activities from domestic industries with improved connectivity, local design and manufacturing.

Public Procurement not only fulfills the government’s obligation towards society for providing better infrastructure & better standard of living but it also helps in boosting the domestic industries by creating a bridge of trust and opportunities among the suppliers and the industry so that everybody is free to participate in equitable and transparent manner. He further mentioned that efficient and transparent public procurement can act as an engine of growth in country.

Sh. H K Sharma, National President, IIMM, mentioned about IIMM and its linkage with industries, international bodies and activities of IIMM and exhorted audience to become IIMM members. He elaborated on legislative trends, executive order trends, technology trends and legal trends and other trends in public procurement and on basic principles of public procurement and on importance of training in public procurement. He emphasized that public procurement in future will be focusing on new procurement value proposition, digital category and service procurement, digital supply chain and supply management, innovative procurement utilization, digital process and tools, cyber security and visibility in public procurement. He also emphasized on the need for holding such seminars and workshops at major public procurement centres, departments, PSUs and industrial centres and mentioned one to be held in eastern region soon.

Sh. Rohit Saxena, Director of PWC highlighted various spend trends, new technologies, speed of procurement, quality and payment issues in public procurement.

Sh. Manoj Kumar, Dy. CEO of Government e Marketplace (GeM) highlighted ease of doing public procurement on GeM and opportunities to sellers on GeM. He mentioned about purchase of goods and services worth more than 1 lakh crore on GeM. He informed about latest changes in Procurement on GeM and user friendly feature on GeM.

Rear Admiral Pradeep Joshi (Retd.) highlighted the present trends in Defence procurement and role of indigenization in defence procurement. Sh. Ashok Kumar, Chief Technical Examiner from CVC, highlighted about common irregularities in public procurement and the importance of transparency in procurement. He highlighted the various provisions of UNCAC and implementation of same by CVC in procurement related areas of organization.

Dr. Mrs. Ishita Tripathi, Addl. DC, Ministry of MSME, elaborated on the role of MSMEs in nation building and latest public policy of procurement from MSMEs. Sh. Rajesh Gupta, DDG from DPIIT discussed the Govt. policy on preference to Make in India and Govt. thrust in Procurement of indigenous goods. Sh. Ratan Singh,

senior advocate and a member of Keating Chamber, London highlighted the role of faster dispute resolution in public procurement and in improving the confidence of business entities in doing business with Govt. entities.

Sh. T G Nandakumar, Co-Chairman BOS and Chairman Seminar, thanked participants, speakers, sponsors particularly PFC for liberal support to IIMM and requested the audience to become members of IIMM and be part of nation building through efficient public procurement. He specially thanked past presidents, Sh. S SK Sharma, Sh. V K Jain and Sh. G K Singh for encouraging Delhi Branch with their presence in seminar.

Participants highly appreciated the content of seminar and requested chairman seminar, Sh. Nandakumar and IIMM Delhi Branch to organize more such programs on Public Procurement. Shri Sanjay Shukla, Delhi Branch Chairman assured to organize more such programs on Public Procurement and Supply Chain Management.

PUNE BRANCH

Indian Institute of Materials Management (IIMM) Pune Branch started Materials Management Week celebrations from the 23rd April, 2022. Professionals from Materials Management & Supply Chain field come together during this week with an objective to create awareness and secure wider recognition of the profession while aiming at elevating the professional status of individuals engaged in the field of Materials Management and SCM.





The theme for the year declared by IIMM National Headquarters was **"Risk and Resilience Management in Post Pandemic Supply Chain"**

Each year, an entire week from 23rd April is dedicated to celebrate various initiatives, recognizing materials management professionals for their outstanding contributions and the overall success of supply chain management activities.

IIMM Pune branch started off the celebration on Saturday, 23rd April, 2022 with a Two Day Workshop on "Design Thinking" conducted at its office in Wakdevadi, Pune. Dr. Vijaykumar Bharathi and Dr. Manoj Pande - both experts in Management from Symbiosis University guided the participants.

This workshop was inaugurated by Mr. Shripad Kadam and Mr. Shrivardhan Gadgil - Chairman and Vice Chairman, of IIMM Pune. Such workshop enables to create the pool of Plug-in type resources. IIMM is committed to continue its relentless journey to create awareness and professional development in SCM, said Mr. K. R. Nair, Vice President (West) of IIMM during his address to the participants. The program was attended by 20 participants.

On 25th April, IIMM-Pune arranged an industrial visit to Cotmac Electronics Pvt. Ltd in Chinchwad, Pune along with a few MBA students from MITWPU and IIMCR college. The objective of this visit was to emphasize the need of effective collaboration between academia

and MSMEs for the benefit of industry and the skill development.

On the concluding day of Materials Management Week Celebration IIMM-Pune organized a MSME Meet Program on 29th April 2022 at Boat Club, Pune to discuss "Reinventing SCM in MSMEs".

This program was addressed by Mr. Deepak Karandikar, Director, Praditi Press Parts Pvt. Ltd., Mr. Vijay Panjabi, Director, Radhesham Wellpack Pvt. Ltd, Mr. Sanjay Suranglikar, Sr. General Manager, Central Purchase, TATA Autocomp. Pvt. Ltd at and Dr. Abhay Kulkarni, Director, IICMR.

Mr. Mohan Nair, National Councilor IIMM, was of the opinion that such seminars will churn out grand new ideas through sharing of success stories. This will inspire MSMEs, to change their outlook and reinvent SCM practices to meet future challenges of competition and scalability

The seminar was attended by 70 top delegates from MSMEs and SCM heads of large corporates.

IIMM appeals to students and professionals to join IIMM as members and take benefit of various courses and professional development activities to develop our nation and be globally competitive.

THIRUVANANTHAPURAM BRANCH

MM DAY CELEBRATION 2022 : MM day celebration was organized by Trivandrum Branch on Saturday, 23rd April 2022 at Mascot Hotel, Thiruvananthapuram as a family get together and an Award distribution function.

Dr. S. Unnikrishnan Nair, Director, VSSC, Trivandrum was the Chief Guest. Dr. P V Venkitakrishnan, Former Director, CBPO/ISRO and Dr. A R Krishnan, Director, M/s. Ananth technologies Ltd., Trivandrum were the special invited guests to the function.

The function started with an invocation by Smt. R Girijadevi. Branch Chairman, Dr. Koshy M George welcomed the Chief Guest, Special Invitees, other guests, members and family members for the function. He also detailed on the major activities held under the auspices of the Branch during the year.

The Chief Guest Dr. S. Unnikrishnan Nair inaugurated the function by lighting the traditional lamp. In his inaugural address he expressed the view that in the modern business, materials management has to play a vital role for the success of the business. He made an excellent speech highlighting the importance of materials management.

Dr. P V Venkitakrishnan was nominated for the second Life Time Achievement Award instituted by IIMM, Thiruvananthapuram Branch consisting of Rs. 50,000/- cash prize and citation. This award is given to him in recognition of his outstanding contributions in the

areas of Aerospace Materials and Manufacturing spanning over a period of 4 decades. The award was given away to Dr.P V Venkitakrishnan by the Chief Guest Dr.S Unnikrishnan Nair. In his response speech, Dr. P V Venkitakrishnan thanked the Chairman and members of IIMM, Thiruvananthapuram Branch and made a mind provoking speech mentioning the importance of materials management in the modern industries. He mentioned that in the present competitive business field, no industry can afford to have a high inventory. So inventory shall be kept at zero level by resorting to just-in-time methodologies. He also appreciated the courses offered by IIMM which are very useful to the youngsters to acquire knowledge in the latest technologies of materials management and build up their career in this field.

Dr. A R Krishnan, Director, Ananth Technologies Ltd, Thiruvananthapuram offered felicitations. Shri M G Narayanan Nair, Hon. Secretary proposed vote of thanks.

The function was followed by Karaoke Ganamela by Trivandrum Voice Troupe and Dinner.



Lighting the lamp by the Chief Guest, Dr.S Unnikrishnan Nair, Director, VSSC.



Inaugural address by Dr. S Unnikrishnan Nair.



Presenting the second Life Time Achievement Award to Dr. P V Venkitakrishnan by Director, VSSC.



Felicitations speech by Dr. A R Krishnan, Director, Ananth Technologies Ltd, Thiruvananthapuram.



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