Environmental Sustainability in the Manufacturing Industry (Strategic Workshop): Event Communique



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VENUE: Manufacturing Association of Nigeria (MAN)

House, 77 Obafemi Awolowo Road, Ikeja, Lagos State

1.0 Introduction

The Strategic Workshop organised by Independent Project Monitoring Company Limited (IPMC), in partnership with the Manufacturers Association of Nigeria (MAN) and the Lagos State Environmental Protection Agency (LASEPA), was a resounding success, gathering global development institutions, high-ranking government functionaries, delegates from various manufacturing sectors, captains of industry and general public. The Strategic Workshop, a flagship event, facilitated impactful engagements with about 300 attendees including key stakeholders to discuss pressing environmental challenges, regulatory compliance, and explore sustainable practices in manufacturing companies.

The workshop creates a crucial platform for the key stakeholders such as manufacturing companies, regulators, development institutions and Consultants to discuss emerging issues relating to regulations and compliance to drive sustainable manufacturing. The strategic workshop themed "Environmental Sustainability in Manufacturing Industry" kicked off with a compelling opening session.

The Managing Director/CEO of Independent Project Monitoring Company, *Mr. Robert Ade-Odiachi*, gave an insightful opening remark reiterating the importance of the strategic partnership with Manufacturing Association of Nigeria, Lagos State Environmental Protection Agency in promoting sustainable practices in manufacturing sector. He stressed the need to manufacturing companies to enshrine sustainability in their strategic direction.

Subsequently, the Director General, Manufacturing Association of Nigeria, *Mr. Segun Ajayi-Kadir, mni*, ably represented by Director, Special Purpose Vehicle Division, *Mr. Oruche Chuma Ambrose (FCIB)* delivered a welcome address emphasizing the significance of the strategic workshop.

The goodwill message was delivered by Director, Environmental Sustainability, Lagos State Environmental Protection Agency, *Mrs. Adedayo Adebayo*, provided a succinct remark, underscoring the relevance of the programme to enhance compliance.

The keynote address, delivered by *Dr. Steven Agugua*, National Project Coordinator, International Labour Organisation was quite insightful setting the stage for the rich conversations and deliberations. The keynote address succinctly dimensions the environmental issues in manufacturing and state the impact of sustainable manufacturing on the economy. He highlights the challenges of adopting sustainability practices in manufacturing sector and identifies opportunities for industry players in sustainable manufacturing.

2.0 Technical Paper Presentation and Panel Session

The first technical paper was delivered by the IPMC Senior Environmental Consultant, Ms. Chika Onyekwere, titled "Embedding Accountability and Creating Mechanisms for Environmental Sustainability in the Industry". She stressed the need for manufacturing companies to assess emerging trends across the supply chains from the point of material sourcing and underscored the intrinsic link between employee welfare and environmental impact, emphasizing the need for accountability, goal-setting, compliance, and proactive measures in sustainability practices within industries. The paper presentation was followed by panel session which was moderated by Ms. Agatha Afemikhe (IPMC ESG Consultant). There were practical insights shared by the distinguished panel which was made of Mr. Babatunde Ayodeji Gbenga (General Manager of Lagos state environmental protection agency (LASEPA)), Mr. Debo Adeniyi (IPMC External Consultant), Ms. Agharese Lucia Onaghise (Executive Director of the Food & Beverage Recycling Alliance (FBRA)) and Ms. Temitope Dosumu (Commercial Manager at Geocycle Nigeria, a subsidairy of Lafarge Plc). Their collective expertise provided a topic, comprehensive perspective on the fostering rich a exchange of experiences and key insights.

The second technical paper in the workshop sub-themed "Regulatory Frameworks within the Industry and Compliance Measures for Environmental Sustainability" was brilliantly presented by *Dr. Babatunde Ajayi*. The paper presentation was followed by a second panel session also moderated by *Ms. Agatha Afemikhe*. The session featured practical insights shared by the distinguished panelists, including *Dr. Babatunde Ajayi*, *Professor Timothy Gbenga Nubi* (Director of the Centre for Housing and Sustainability Development (CHSD) and former Dean of the Faculty of Environmental Sciences at the University of Lagos), *Mr. Dara Caulcrick-Odebo*, *CSM* (Private Sector Engagement Lead at UNDP), and *Ms. Temitope Dosumu*. Their collective expertise provided a comprehensive perspective on the topic, fostering a rich exchange of experiences and key insights.

3.0 Key Highlights and Recommendations

3.1 Key Highlights

At the end of the conference, several key issues evolved, and they are as follows:

- 1. Accountability begins with acknowledging the truth about the environmental impact of one's operations. It involves transparency in identifying these impacts, setting goals, and implementing policies to mitigate them. This self-awareness is crucial for driving meaningful environmental actions in manufacturing sector.
- 2. Industries often view the UN Sustainable Development Goals (SDGs) as distant targets, neglecting their responsibility to adopt these goals. It is crucial to proactively measure progress against these goals and comply with relevant regulations and frameworks. Ignorance is no excuse; awareness and adherence to industry-specific regulations are essential for sustainable operations.
- 3. In an era of rapid technological advancements, including artificial intelligence, manufacturing firms should keep pace with the emerging trends and drivers of sustainable manufacturing, Horizon scanning—systematically monitoring for early signs of significant developments—can help organizations stay ahead of emerging trends and enhance operational quality.
- 4. The welfare of employees is intrinsically linked to the impact an organization has on the environment. Ensuring the safety and health of staff not only promotes a better working environment but also reflects a company's commitment to sustainable practices.
- 5. Being transparent with the public about sustainability efforts is essential. This includes publishing sustainability reports on the company's website, which can be informed by audit procedures that identify areas for improvement. Taking corrective actions based on these audits will strengthen sustainability practices.
- 6. Water pollution remains a significant environmental challenge, primarily due to improper containment of waste that contaminates groundwater. The strategic industrial layout of Lagos, with 15 out of 20 local governments having access to the ocean and lake, has led to the unlawful disposal of industrial waste into these water bodies.
- 7. There is a significant positive impact of the Lagos State government's ban on the usage and distribution of Styrofoam and other single-use plastics. This directive has notably reduced environmental pollution and substantially decreased the costs associated with clearing drainages. Prior to the ban, the government expenditure on drainage clearance was four times higher, highlighting the effectiveness of this environmental policy.

- 8. There are adverse health impacts associated with industrial activities, particularly in areas where chemical and drug manufacturing are prevalent. Hospitals in these industrial zones report peculiar disease patterns directly correlated with the pollutants emitted by these industries.
- 9. The high levels of lead found in the soil, as evidenced by laboratory tests on borehole water, have severe implications for community health. This situation calls for manufacturing companies to be acutely aware of their environmental footprint and the direct correlation between their activities and public health outcomes.
- 10. Funding challenge remain a major issue in manufacturing sector. Adopting sustainable practices can mitigate these issues and position the industry players to cheap environmentally sustainable funding and investment.
- 11. There is a significant gap in stakeholder engagement during various phases of policy formulation. This lack of inclusion makes the enforcement of government policies challenging, as manufacturers often feel alienated from the policy-making process.
- 12. Economic considerations should be balanced with environmental concerns. Economic pressures should not overshadow the importance of addressing environmental issues. The health of children, the quality of water, and the prevention of skin damage should be prioritized while economic hardships should not be a justification for environmental degradation.
- 13. Manufacturing companies were encouraged focus on providing living wages, which would help reduce poverty (SDG Goal 1), hunger (SDG Goal 2), and improve access to quality health (SGD Goal 3) and education (SDG Goal 4) for children. This approach can significantly reduce the number of out-of-school children and combat child labor. (SDG Goal 8). This will help to achieve the major sustainable development goals.
- 14. Manufacturing companies should align their activities with the global initiatives such as the United Nations Global Compact, which provides frameworks for addressing socio-environmental challenge.
- 15.United Nations Development Programme (UNDP) contributions to policy formulation and private sector engagement is notable to drive sustainability initiatives.
- 16. The Lagos State Environment Protection Agency (LASEPA) reiterated its commitment to continuous stakeholder engagement through various platforms, including seminars, workshops, conferences, and social media. These efforts aim to promote environmental sustainability and ensure compliance with government regulations.
- 17. There is a strategic partnership between LASEPA and the Lagos State University of Education to create awareness of sustainability practices among teachers and pass the knowledge to students located in urban and suburban schools.

- 18.United Nations Development Programme (UNDP) has developed clean energy portfolio for the Federal Government of Nigeria which will be launched by the government.
- 19. Sustainability is a central strategic focus for the United Nations Development Programme (UNDP) globally. Currently, the UNDP is developing a comprehensive clean energy portfolio for the Federal Government of Nigeria.
- 20.UNDP intervention cut across diverse initiative such as capacity building for various sustainability projects, identifying innovative individuals, empowering them, and ensuring that the knowledge shared is accessible to the broader community.
- 21. The compliance rate for air quality monitoring in Lagos is currently below 10%. The air quality control team is actively monitoring emissions in industrial zones, aiming to achieve a 15% compliance rate within a year.
- 22.As of September 2023, compliance with effluent treatment and wastewater discharge standards in Lagos state was estimated at 17%. The Lagos State Environmental Protection Agency (LASEPA) aims to increase this compliance rate to 34% within a year. The government agency aimed to achieve this goal through stakeholder engagement, capacity building for employees managing effluent treatment plants, and enhanced monitoring and compliance efforts.
- 23. Technology continues to play a pivotal role in monitoring land waste, noise pollution, emissions, and air quality.
- 24.It is imperative for companies and households to submit groundwater specimens for testing to ensure compliance and safeguard environmental health.
- 25.An estimate of 120 sawmills produce large quantities of sawdust in Adekunle area of Lagos state, which is often burned, releasing CO2 into the atmosphere. There is a significant opportunity to harness waste management potential in this area to mitigate environmental impact.
- 26. The Lagos State Government has been proactive in enacting laws and regulations to drive environmental sustainability. However, increasing awareness and enforcement of these laws and policies is crucial.

3.2 Recommendations

Several key strategies and recommendations that emerge from technical paper presentations and the panel sessions. They are as follows:

3.2.1 Government

- 1. Government agencies should actively monitor clustered industrial activities of SMEs across the state to ensure compliance with regulations. Many SME activities, such as burning and the use of generating sets, contribute to CO2 emissions, leading to air pollution and associated health risks. Awareness and advocacy drive should be scaled up to ensure SMEs stay informed about emerging policies and sustainable manufacturing practices.
- 2. Government regulatory bodies must engage stakeholders robustly at various stages of policy formulation with manufacturing companies, facilitating smoother policy implementation.
- 3. It is essential for regulatory bodies to provide a transition period between policy pronouncement and enforcement, allowing industrial players time to adjust and develop plans in response to policy changes.
- 4. Clarifying and simplifying the terminologies of sustainable manufacturing will help industrial companies understand and implement these practices effectively.
- 5. Governments at all levels should adopt integrated governance, encouraging corporate firms to embed sustainability into their governance frameworks. This could include tax incentives for companies that adopt sustainable practices, comply with global standards, and meet regulatory requirements.
- 6. Regulatory bodies should shift public perception about the agencies from punitive to corrective government agencies by engaging with the public and all stakeholders.
- 7. It is imperative to foster a sustainability mindset among households, firms, and other economic agents.
- 8. Collaboration and partnerships should be holistic, involving high-energy-consuming industries such as steel, brewery, and power sectors in waste-to-energy initiatives. These segments should be encouraged to develop waste-to-energy solutions, seeking necessary permits and building the required expertise for sustainable operations.

3.2.2 Manufacturing Companies/Manufacturing Associations of Nigeria Members

1. Manufacturing firms should proactively measure their alignment with sustainable goals and comply with sustainability regulations. Regulations should be viewed not as obligations but as mechanisms to ensure environmentally sustainable operations.

- 2. Manufacturing companies should develop a comprehensive compliance register those answers critical questions about environmental impact, identifies relevant regulators, and clarifies the organization's compliance stance. Engage experts to support the development and maintenance of this register.
- 3. Industry players should adopt horizon scanning practices to detect early signs of important developments. Conduct research to enhance operational quality and stay ahead of industry trends.
- 4. Implement thorough audit procedures to identify sustainability improvement areas. Use the audit findings to prepare and publish detailed sustainability reports, demonstrating transparency and commitment to sustainable practices.
- 5. Manufacturing firms should adopt international frameworks to measure GHG emissions across all scopes and report their gas emission. It is essential to work with consultants to accurately report emissions and identify areas for reduction.
- 6. Organizations should approach sustainability goals with the same seriousness as they do business goals. This alignment ensures that sustainability becomes an integral part of the organizational strategy, driving long-term environmental benefits.
- 7. A cross-functional team is necessary to assess compliance risks within an organization. This team should maintain a compliance register that tracks environmental impacts, identifies regulators, and outlines the organization's stance on compliance issues. Consulting with experts can enhance the effectiveness of this register.
- 8. Manufacturing firms should keep abreast with the key regulatory parameters set by Lagos State Environmental Protection Agency which include air emissions, soil and groundwater contamination, surface and stormwater contamination, chemical use and storage, noise generation impacting natural structures or personnel, and radiation generation and release. Other parameters encompass biohazard and nanosubstance use, industrial and hazardous waste management, wastewater discharge, impacts on archaeological and wildlife areas, and construction by-products. The agency also focuses on waste minimization activities, such as reuse and recycling, and the conservation of natural resources.
- 9. Sustainable manufacturing requires industry players to critically assess their processes and operations, integrating innovations in product development and supply chains. Tracking product life cycles to facilitate recycling and the production of new items is essential.
- 10. Manufacturing companies should align their operations with emerging government policies, such as Plastic Waste Management Rules and National Policy on Solid

- Waste, which are in line with global standards. Adopting waste-to-energy and energy-efficient technologies will help achieve sustainable practices.
- 11.Involving all departments—supply chains, procurement, health and safety, environment, human resources, production, etc.—in developing sustainability plans will aid strategic decision-making.
- 12.Learning from industry peers who have adopted alternative energy sources and sustainable practices can provide valuable insights. Transitioning from a take-use-dispose model to a circular waste management system is crucial.
- 13. Economic pressures should not overshadow environmental concerns. Manufacturing firms must prioritize environmental health, as neglecting these issues can have severe consequences, including impacts on children's health and water quality.
- 14. Engaging consultants to find sustainable solutions and building staff capacity through training and development programs will enhance sustainable manufacturing practices.
- 15. Adopting circular solutions to reduce CO2 emissions through innovative alternative energy sources is vital.
- 16.Manufacturers should advocate for sustainable practices from material sourcing to final consumption. This includes capacity building in institutions, private sectors, and government bodies to promote a circular economy and achieve zero waste solutions.
- 17.Proper management of electronic waste is essential. Manufacturing companies should use accredited collectors and recyclers to ensure environmentally sound disposal.
- 18. Submitting mandatory Environmental Management System reports and conducting biennial environmental audits through third-party consultants, as required by Lagos State Environmental Protection Agency, is crucial for compliance.
- 19.Exploring strategic partnerships with university research institutes can drive sustainability initiatives in waste management, alternative energy generation, and product development.
- 20. The UNDP plays a crucial role in helping organizations and governments understand global standards to attract foreign direct investments. This can take the form of initiatives aimed at talent development and job creation for the youth. This model facilitates on-the-job training and skill development in private firms, preparing individuals for future employment or entrepreneurial ventures. The European Union, a significant funder of these programs, requires firms seeking to access this human capital to adhere to green energy principles. Therefore, manufacturing companies

- should align their operations with sustainability standards to tap into emerging global funding opportunities and human capital support.
- 21. Manufacturing companies must stay informed about regulations guiding their sectors and develop compliance initiatives. Keeping up with emerging trends globally will generate innovative ideas for better compliance.
- 22. Employees should provide honest feedback about sustainability practices, which might include internal audits. Customers, investors, and regulators need to be informed about these practices.
- 23.SMEs should adopt alternative energy sources from waste to generate power for their manufacturing plants.
- 24.Recyclers should not only focus on recyclable items but also develop initiatives to close the loop with non-recyclable waste.

3.3. Other Recommendations

- 1. Manufacturing companies should establish strategic partnerships with development institutions such as Carbon Disclosure Project, World Bank, UNDP, and IFC. Nationally, listed companies should align their reporting with the Nigeria Exchange 2018 sustainability disclosure guidelines to address environmental and social issues effectively. Strategic partnerships and effective reporting can provide access to funding and help monitor progress.
- 2. Identifying and engaging key stakeholders—internal, external, national, and global—is crucial for driving sustainable manufacturing.
- 3. Given Nigeria's low life expectancy in West Africa, sustainability is a pressing current issue, not just a future concern. Addressing environmental issues is critical, as neglect leads to widespread reliance on chemical drugs.
- 4. Sustainability awareness should begin in educational settings. Reviewing nature studies and incorporating sustainability education from elementary to junior high levels, including poetry on environmental practices, can help achieve these goals.
- 5. Firms, households, and institutions should have their borehole water tested by government regulatory bodies. This ensures access to safe, clean water and allows government officials to provide advisory services and recommend the best available technologies for specific locations.

4.0 Conclusion

The Strategic Workshop for the Manufacturing Sector in Lagos State provided a robust platform for discussing the multifaceted challenges and opportunities in achieving environmental sustainability. The insights and strategies discussed will serve as a valuable roadmap for stakeholders committed to improving environmentally sustainable practices in manufacturing sector.

Compiled by:

The IPMC Research Team