

ESG



# ESG

## IN MANUFACTURING



Harnessing the Power of Digital Platforms  
to Drive ESG Excellence in Manufacturing



# INTRODUCTION

Environmental, Social, and Governance (ESG) factors have become increasingly important in the manufacturing sector.

Today, manufacturers face growing pressure from various stakeholders, investors, customers, employees, and regulators to adopt ESG practices and demonstrate their commitment to sustainability and social responsibility.



## PURPOSE

The purpose of this guide is to provide manufacturers with a comprehensive insight to ESG practices, including best practices, case studies, and practical recommendations for implementing ESG in their operations and strategies.

## WHAT YOU'LL GAIN

- Overview of key ESG challenges and opportunities
- Best practices and case studies showcasing ESG initiatives
- Practical recommendations for integrating ESG into your operations and strategies
- Insights into the role of digital platforms in supporting ESG initiatives
- A roadmap for assessing your current ESG practices, setting goals, and measuring progress





# ENVIRONMENTAL SUSTAINABILITY

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## Reducing Environmental Footprints

Manufacturers play a critical role in addressing environmental challenges, such as climate change, resource depletion, and waste generation. By adopting sustainable practices and technologies, manufacturers can reduce their environmental footprint and contribute to a more sustainable future.



## Key Challenges

- Energy consumption
- Water usage
- Waste generation
- Raw material management
- Recycling policy implementation



## Best Practices

- Integrate a holistic digital platform
- Digitally monitor energy consumption
- Leverage real-time data to receive critical alerts
- Minimize waste through recycling and reuse
- Adopt circular economy principles
- Automate and optimize raw material management



# HOW DIGITAL PLATFORMS HELP

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## Matics in Action

Digital platforms like Matics empower production teams to make smarter decisions in real-time by providing visibility into energy consumption, water usage, waste generation, and raw material management. By analyzing data from sensors and machines, Matics can identify opportunities for improvement and help manufacturers set and achieve environmental sustainability goals.



## Case Study: Automating and Optimizing Raw Material Management in Plastic Manufacturing

The precise management of raw materials is crucial for maintaining product quality and cost-effectiveness. Digital platforms offer real-time monitoring and adjustment capabilities to address this challenge.

- A plastic manufacturer requires a precise color proportion of 1%
  - A minuscule increase to 1.1% increases rejects, wasted material, and cost per unit.
- Before Matics, color issues were identified during manual audits of the recipe and units produced.
- With Matics, real-time triggers and alerts are automatically delivered to the mobile device of relevant stakeholders
- **Managers and operators are empowered with call-to-action capabilities, allowing for immediate, remote adjustment of proportions before rejects are produced.**
- Overall quality issues, rejects, and waste declined.

# PRACTICAL TIPS

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## Asses Current Practices

Conduct an environmental sustainability assessment to collect and analyze data, identify areas for improvement, and set achievable goals.

## Integrate Digital Platforms

Invest in energy-efficient technologies and use Matics to monitor energy consumption and track the impact of your investments.

## Engage Employees

Engage your employees by providing training and resources, and use Matics to create dashboards and alerts that keep them informed and engaged in sustainability efforts.

## Leverage Real-time Data

Ensure key stakeholders receive triggers and alerts when material or energy consumption rises, or rejects increase

## Automate Processes

Implement process automation systems to optimize raw material management, reduce waste, and improve efficiency.







# IMPORTANCE OF SOCIAL IMPACT

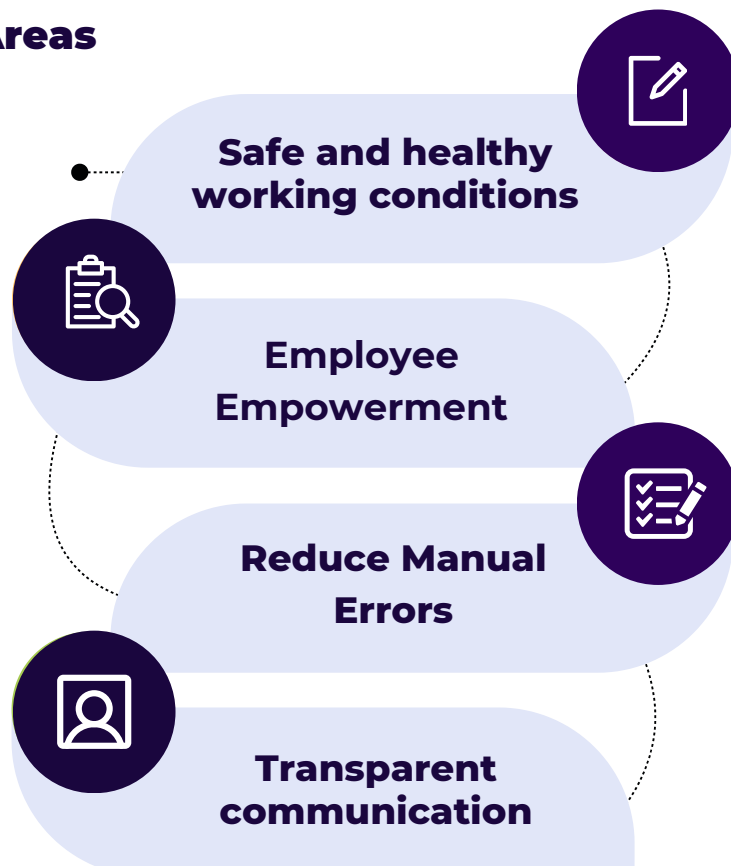
Manufacturers have a responsibility to ensure that their operations and supply chains are socially responsible, respect human rights, promote fair labor practices, and contribute to the well-being of the communities in which they operate.

A key aspect of social responsibility is empowering employees and fostering a culture of collaboration and continuous improvement.

## The Role of Digital Platforms

Digital platforms help manufacturers promote social responsibility by providing real-time data, enabling immediate identification and resolution of potential issues. Matics empowers production teams to make smarter decisions and drive continuous improvement by providing them with real-time insights, triggers, and call-to-action capabilities

## Key Focus Areas







## **Empowering Production Teams, Breaking Down Silos, and Fostering Collaboration**

A Matics customer in the food and beverage industry leveraged the platform to empower their personnel and foster a culture of collaboration and continuous improvement. The company used Matics to conduct a stop and downtime analysis to identify the most common causes in order to devise a plan to reduce them.

The managers and production floor team members worked together, each bringing in their unique insight into the downtime and stop-reasons, to develop and implement solutions, which significantly reduced downtime and improved overall equipment effectiveness (OEE) based on their findings.

**By providing employees with the tools and data they need to make informed decisions, manufacturers can tap into their workforce's knowledge and expertise, leading to improved performance and a more engaged and motivated team.**

# PRACTICAL TIPS

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## **Break Down Silos**

Promote cross-functional communication and knowledge sharing to improve decision-making and drive innovation by integrating a centralized digital platform

## **Empower Production Teams**

Encourage employee feedback and participation in problem-solving initiatives, fostering a sense of ownership and engagement.

## **Acknowledge Success**

Implement a recognition program that celebrates employee contributions and reinforces a culture of excellence.

## **Continuous Learning Culture**

Provide targeted training and development opportunities to upskill your workforce and promote a culture of continuous learning and improvement.





# GOVERNMENT & ETHICS

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## **Navigating A Dynamic Regulatory Environment**

Good corporate governance and compliance with industry regulations are essential for manufacturers to build trust with stakeholders, manage risks, and ensure long-term sustainability.

## **Key Challenges**

- Dynamic and constantly evolving regulatory landscape
- Requirement for detailed and accurate proof of compliance
- Complex and time-consuming auditing processes
- Need for robust data management and reporting systems
- Potential for significant financial penalties and reputational damage in case of non-compliance

## **How Matics Can Help**

Digital platforms support good governance and regulatory compliance by providing real-time data and insights for decision-making and risk management. Matics helps manufacturers monitor and manage risks in real-time, enabling quick and effective responses via call-to-action capabilities. By providing a centralized platform for data collection and analysis, Matics also supports transparency and accountability in decision-making and reporting, as well as simplifies reporting and proof-of-compliance in the event of an audit.



## **Ensuring Product Freshness and Compliance in the Food and Beverage Industry**

A leading food and beverage company faced the challenge of ensuring consistent product freshness while complying with strict industry regulations. The company recognized that process automation could provide the necessary precision and efficiency to meet these demands.

The company integrated Matics' real-time digital platform to monitor material levels in storage silos and automatically initiate a refill process when levels dropped below a certain point. This ensured a continuous supply of fresh ingredients, avoiding costly production delays.

The company integrated regular and automated quality assessments into its production process to further guarantee product freshness and compliance with quality standards. The process automation system executed these checks at scheduled intervals, ensuring each product batch adhered to the required freshness and quality parameters.

**By leveraging process automation, the company maintained consistent product freshness and demonstrated compliance with stringent industry regulations. The automated monitoring and assessment enabled the company to provide evidence of compliance during audits.**



# PRACTICAL TIPS

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## **Implement robust data management and reporting**

Leverage real-time data and insights to proactively identify and address potential compliance issues.



## **Foster a culture of integrity and compliance:**

Provide regular training and education on regulatory requirements and best practices for compliance.



## **Prioritize transparency and accountability:**

Communicate compliance performance and initiatives and ensure decision-making processes are transparent and aligned with regulatory requirements.



## **Conduct regular audits and assessments:**

Perform periodic internal audits to identify potential compliance gaps and areas for improvement.



# CONCLUSION

In today's rapidly evolving manufacturing landscape, integrating Environmental, Social, and Governance (ESG) practices into operations and strategies is no longer optional; it is a business imperative.

Manufacturers that embrace this transformation and leverage platforms like Matics to embed ESG into their operations will be well-positioned to create long-term value for all stakeholders while also contributing to a more sustainable and equitable future.

# THANK YOU

Contact us today to see how Matics can help you empower your production teams and embrace ESG policies with ease

