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SUSTRAINY PROJECT



PANORAMA OF SUSTAINABLE BUSINESSES PRACTICES

ENVIRONMENTAL SUSTAINABILITY IN THE SUPPLY CHAIN

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Environmental sustainability in the supply chain

We create value and growth in line with the UN Sustainable

Development Goals



Resource: Bayer

Category – Key words	Sustainable Development Goals, Circular Economy, Business, Environment, ESG, CSR, Biodiversity, Climate change, Supplier code of Conduct, By-product recycling, solvent reuse, Environmental protection
Who?	Bayer
Location	Worlwide
Years of implementation	2015- ongoing
Website	https://www.bayer.com

Abstract

There were two types of "Rs" in place: by-product recycling and solvent reuse. The economic criterion was one of the reasons for carrying out both, but, in addition, they had to comply with current regulations, which were the European Regulation on Registration, Evaluation, Authorization and Restriction of Chemical Substances (REACH), which regulates the production and use of chemical substances, and their potential impacts on both human health and the ecosystem a. Solvent reuse was high, but however there was a certain amount that was not recovered and was discarded as waste.

To solve the problem, the logistics department developed a tool software that allows employees to enter the bill of materials and entered it within their MRP system.

For other hand, the use of renewable energy in all its centers (SDG 7), the recovery of water resources in its production plants and research farms (SDG 13), or the renewal of the spaces used in energy efficiency and promotion of innovation in work (SDG 9), are some of the main lines of action to reduce its footprint on the environment.

Additionally, the company is analysing and adapting its facilities to have more efficient spaces that favour better use and better use of resources, as another of the priorities on which Bayer is focusing its investment and efforts in this regard.

Beyond direct action, Bayer is also analysing its entire value chain and helping its suppliers in this line, reformulating the sustainability criteria that are integrated into its policies with third parties and accompanying them in the process to reduce their emissions. Specifically, Bayer analyses its suppliers through EcoVadis online evaluations or on-site audits carried out by external auditors and the company itself.

Concept Addressed

In the increasingly competitive marketplace, growing companies frequently face problems of overstocking, late orders, high production costs, and inconsistent quality. What generates economic losses and market share. The Material Requirements Planning (MRP) 1 system as an ideal complement for production planning and control has great successes in large companies as a fundamental tool to ensure the timely supply of material, reduce storage costs and avoid waste production stoppage due to lack of material.

The benefits derived from the implementation of an MRP system vary according to each company and will depend on the quality of the old system compared to the new system, which can be:

- Decrease in stocks, which in some companies have reached 50%.
- Improvement in customer service that can increase up to 40%.
- Better productive planning.
- Lower costs and more benefits.
- Better coordination in production and inventory scheduling.
- Guide and help in planning resources according to the capacity of the company.

There have been companies and entities that have anticipated compliance with national and international regulation on recycling, and more specifically in the Obligation to collect products that have reached the end of their life cycle.

Relevance

Following and Inclusive growth Bayer is providing more people in all the regions of the world with access to health care and food security and devising solutions to environmental protection, esp. decarbonization, climate adaptation, and biodiversity preservation. Its products, services and innovative prowess enables the company to contribute significantly toward meeting the United Nations 'Sustainable Development Goals about combating hunger (Goal 2) and providing health care (Goal 3). Its work also helps the fight against poverty (Goal 1). In addition, Bayer is sharpening our focus on empowering women (Goal 5), redoubling the company efforts to reduce greenhouse gases along our value chain and build resilience towards the impacts of climate change (Goal 13) and protecting life on land (Goal 15).

Eventually accreditation

Bayer currently publishes annual sustainability reports that are subject to third party audits, is part of the GRI and Carbon Disclosure initiatives Leadership and has a remarkable recognition and reputation from the point of view.

Tips to implement

1- First, you have to define the list of materials that make up a product or scandal, which is also known as its structure.

2- Prepare the Master Production Plan, which will serve as a framework to subsequently develop the MRP. The basic variable to consider is the number of units to be produced in a given period of time.

3- It is necessary to carry out an inventory record of all the company's assets, not only those that are available, but also those that are going to be used, and note the expected inputs and outputs.

4- Capture the inventory data in a software that allows, in real time, to consult the modifications that occur.

5- Indicate the gross needs, understanding as such all the inputs, components and other elements that are going to be used in manufacturing.

6- Indicate the expected receptions of inputs or other components. This point is essential to check that everything arrives in a timely manner and, if not, solve the incident as soon as possible.

7- Perform the calculation of the inventory available at a certain time. This will be achieved by adding the scheduled receipts to the previous inventory and subtracting the gross requirements.

8- If the available inventory does not cover what is established in the system, a net need is generated, which means requesting a component or input. It is calculated by adding the safety stock to the net needs and subtracting the initial inventory and the programmed needs.

9- The reception of production orders refers to the raw materials that have to be received to launch a production order.

10- Launching a production order for a certain product.

Bibliography

https://www.bayer.com/