

MARKETING ASPECTS OF GREEN MANUFACTURING IN PHARMACY

Sofronova I.V., Ammar Rashid

National University of Pharmacy, Kharkiv, Ukraine

Manufacturing plays a very strategic role in an organization, especially to build competitive advantage and improve performance. With rapid changes in technology, customer needs and globalization, manufacturing itself is constantly transforming and evolving.

The term "green" manufacturing can be looked at in two ways: the manufacturing of "green" products, particularly those used in renewable energy systems and clean technology equipment of all kinds, and the "greening" of manufacturing — reducing pollution and waste by minimizing natural resource use, recycling and reusing what was considered waste, and reducing emissions.

Growing numbers of businesses are finding that reducing resource use, waste, and pollution, along with recycling and reusing what was formerly looked at as waste, yields benefits not only in terms of an improved bottom line, but in terms of employee motivation, morale, and public relations. Corporate and business leaders at the forefront of redesigning, restructuring, re-engineering, and retooling operations and processes to be more environmentally and socially sustainable are finding that doing so produces measurable results that others can and would like to emulate, even leading to new business lines and a notable recognition for their efforts.

New ways of thinking about manufacturing, both broadly and narrowly, are having a big impact on manufacturers worldwide.

Such efforts are intimately entwined with a movement toward taking on, or accepting, greater corporate social responsibility. One such driving force has been the development of systems analysis, which has evolved into the growing field of industrial ecology.

Green manufacturing has become a powerful marketing tool. Consumers increasingly have begun buying green products that are more cost effective and healthier and leave less of a carbon footprint on our planet. As a result, manufacturers are developing products that fit this need. At the same time they are implementing supply chains that are greener.

The basics of green manufacturing focus on minimizing the impact of the manufacturing process on the environment. It begins with the development of green products and extends to implementing a green supply chain. Once this has been done, green manufacturing can be turned into a marketing advantage.

The following are some basic characteristics of green manufacturing: (1) Less consumption of natural resources; (2) Less energy used in production; (3) Less gas and toxic material released into the environment; and (4) Less waste created from the manufacturing process.

Product development studies show that the design stage determines 70 percent of a product's environmental impact. Green manufacturing aims:

- Area should meet the highest grade of air standards in world.
- Heavy mineral residues are restricted in irrigation water and soil (tests for mercury, cadmium, arsenic, lead, chrome, etc).
- Processing water must meet the National Drinking Water Standard.
- Chemical applications are restricted and regulated, and some of the most poisonous pesticides and herbicides are banned.

To achieve Green manufacturing aims we need such strategic challenges as: range of coordinated actions, trade and environment policies (mutually supportive), eliminating environmental harmful subsidies, promoting the transfer of technologies and financial resources, efficient operation of markets, and achieving greater international cooperation.