

## **BUSINESS AND FINANCIAL INCENTIVES, OPPORTUNITIES, AND BARRIERS**

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### **Summary**

A key feature of recent decades is the growth of concern in business circles about “green” production. Greening of business and output of environmentally benign products inspires hope for reconciliation of the contradictions between environmental challenges and industrial development, and hence offers hope for overcoming the environmental crisis.

The change of business orientation is a result of the integral stimulation process making environmentally safe production profitable. A considerable part of the incentives is connected with institutional factors, with increase of environmental concern, and the consequent consumption of “green” products. Unfortunately, the greening of industry is not high in the agenda of most developing countries, and countries in transition. This is caused not only by inadequate income levels, but also by undeveloped environmental legislation and general lack of environmental concern.

### **1. Modern trends for interaction of society and the nature**

There has been a kind of a turning point in relations between nature and society. The essence of this is that humankind has not only realized the fatal consequences of the consumer approach towards nature, but also has become capable of developing a system of restrictions and incentives to promote caring for nature. The restrictions include the purposeful actions of the state in the field of regulation of the natural resources use. Since the 1970s most developed countries have developed a system of public environmental management, and these systems have certainly helped to reduce adverse environmental impact. Another restricting factor is the rise in the price of raw materials

which took place in the mid 1970s. This appeared to be a trigger for companies to reduce production costs by decreasing consumption of resources and generally greening their industries. A major incentive for environmental harmonization was the change in consumer mentality towards preferential purchase of green products. This led to a complete change of many generally applied rules of company activity.

In recent decades, many companies have become increasingly green. Many representatives of business circles have demonstrated the greening of their activity, which can be found in such references as “Changing a Course”, “A Global Business Perspective on Development and the Environment” or “Erfolg Durch Umweltmanagement”, etc. A significant distinctive feature of today is a greening of production. Goods which do not meet the environmental standards, turned out to be unattractive to people, and dirty production by an enterprise clearly began to affect the company’s image. At the same time, investment into environmental equipment and development of environmental services have proved quite profitable. The market for environmental services and goods turned out to be one of the most rapidly developing sectors.

These changes are really global, as they permit a more optimistic assessment of the future of our civilization. Environmental crisis seemed to be unavoidable, but it can be overcome or considerably delayed by changing the system of natural resources use. Contradictions between business and environment, and between market principles and environmental challenges, previously considered insoluble, are becoming more harmonious.

However, it should be pointed out, that greening of activity is not typical for all companies, and the same goes for active environmental company policies. First of all, greening of production is peculiar to the companies operating in developed countries. In spite of the aspiration of developing countries to harmonize humanity and the environment, they are not capable of solving the problems because of the number and scale of environmental problems and their low living standards. In this connection, the generators of the most advanced and progressive changes in natural resource use are mostly large transnational companies, as well as medium-level and small companies entering the markets of the developed countries.

## **2. Production Greening**

Today, more and more companies are striving for ecologization (greening) of their activity. Green production is becoming one of the necessary conditions for ensuring the competitiveness of a company. At present, it is more difficult for a company to win its way in the competitive market without a “green” image and high quality of manufactured products.

Greening of production is going on in various directions, such as:

- Output of environmentally clean food without chemical supplements.
- Output of a new generation soft detergents which are environmentally benign. For instance, most European companies refuse to use phosphorous-containing components in detergents.

- A major change in package system, in order to create either multiple use packaging materials or completely recyclable ones. Several companies do not use polyethylene and have replaced it with paper. Labeling is marked with special paints made according to stringent environmental standards. The 3M Company is an example of a “green” company. Research centers are developing novel modifications of polyethylene which are readily degradable in the environment. Leading world companies are introducing goods in recyclable packaging materials. The Estee-Lauder Company has put on sale “the Origins” series packed in the multiple use material. Some companies dealing with production of beverages and juices, use glass bottles instead of plastic ones.
- One of the significant elements of greening of production is decreased used of raw materials. This element is one of the major directions of production greening in recent years. It is important to note that any company acting in the competitive world market is interested in developing this direction towards ecologization. The cost of raw materials is one of the main components of production costs. Decreased use of virgin raw materials results not only in production greening, but cuts down the costs as well.
- Refusal to use toxic and hazardous materials in the production cycle. A classic example is the Eternit Group, a Swiss company which withdrew the use of asbestos in buildings in its Latin-American branch enterprises. Asbestos has been replaced by completely environmentally friendly non-toxic local raw materials. This was a trigger for considerable greening of production and increase of sales from US\$3 million to US\$6 million.
- Recycling or processing of company-generated wastes, and use of recycled waste products. In recent years, an increasing number of companies have been exclusively using recycled paper. Such large companies as American Airlines and the Bank of America have switched to use of stationary and paper goods made of recycled materials.
- Environmental disaster preventive measures. As a rule, this can be achieved by increasing the reliability of oil and gas distribution mains, and ocean-going tankers. In 1990, the Conoco Company ordered double-hull tankers manufacture. The use of such tankers is to minimize the risk of accidental spillage.

Thus, many more alternative forms of greening production have being appearing in recent years. This is becoming one of the major concerns of industrial activity.

The diversity of forms of production greening makes it complicated to figure out the main factors guiding companies to implement the process. For the first time, financial incentives have proved to play a significant role in production greening. All companies strive to maximize profits. In competitive market conditions, the main source of profits is not so much increase of prices for the output, but expansion of sales and reduction of production costs. Costs can be decreased by reducing use of natural raw materials—an important trend in production greening.

The fuel and energy crisis of 1973 to 1974 was a strong motivator in this respect. During this period, the policy of OPEC countries caused a considerable rise in the price of oil products. More efficient use of natural resources was a matter of survival for

many companies. Certain manufacturers, firms, and sectors committed to using large volumes of materials turned out to be uncompetitive compared with companies using smaller quantities of materials. Naturally, this situation promoted investments flows towards sectors less dependent on raw material usage. Thus, increase of raw material prices promoted both ecologization of the industry's structure and lowering of consumption of most types of raw materials. In many developed countries there has been an absolute drop in energy consumption since this period.

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### **Biographical Sketch**

**Olga I. Malikova** was born in 1967. She graduated from the Moscow State University, named after M.V. Lomonosov, Economics Department in 1989. She obtained her Ph.D. (Economics) in 1992. Her thesis was devoted to the problems of upgrading funding and management systems for the environmental

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He worked for six years in the nickel factory, and smelting workshop of the Norilsk Plant. He worked for various scientific and research institutions over 17 years. Today he is a professor at the Russian Academy of State Service under the President of the Russian Federation. His scientific interests involve forecasting allocation of industries in the national economy, efficient environmental management, eco-development, and information support for sustainable life activities.