

3) In Belarus werden die Berechnungen durch elektronische Zahlungssysteme sehr selten verwendet. In der EU (zum Beispiel in Deutschland) sind alle Zahlungen im Internet mithilfe der Bankkarten gewährleistet. In Belarus sind die Provisionskosten für Online-Zahlung ziemlich hoch.

Die wichtigste und dringlichste Aufgabe heute ist die Umsetzung des staatlichen Programms der Entwicklung der Informations- und Kommunikationstechnologien, die die inländischen und ausländischen Investitionen für die Infrastruktur, Informationstechnologie und Software-Systeme identifizieren.

E-Commerce ist natürlich kein universeller Mechanismus für die Entwicklung einer progressiven und nachhaltigen Wirtschaft. Aber diese Entwicklung ist heute notwendig für den Übergang zu einem ganz anderen, höheren Niveau von Produktion und Konsum.

Abschließend ist darauf hinzuweisen, dass die Maßnahmen für die Entwicklung der Selbständigkeit dazu beitragen werden, die folgenden Probleme zu lösen:

- Flexibel zu werden und rechtzeitig auf ungünstige Entwicklungen auf dem Markt zu reagieren, um die Wettbewerbsfähigkeit der belarussischen und deutschen Selbständigen auf dem Markt zu fördern;
- Neue vielversprechende Projekte für die internationale Kooperation zu überwachen, zu analysieren und einzusetzen;
- Ausländische Erfahrungen zu sammeln und effektiv zu verbrauchen.

A.A. Мусатова, Д.О. Хаданович
УО БГЭУ (Минск)

NON-WASTE PRODUCTION: PROFITABLE AND ECOLOGICAL WAY OF MANUFACTURING

Humanity is faced with the need to implement sound environmental development. This requires new knowledge about the environment, new technologies, and new norms of behavior. In connection with the necessity to reduce waste production, a new concept of development of industrial plants appeared, which was called "cleaner production". It involves eliminating different waste, the establishment of non-waste technologies.

Non-waste production can solve two problems at once: it increases the efficiency of the production process by reducing costs, as well as it reduces negative influence on our environment. Nowadays many countries try to develop their industry by putting into operation different kinds of non-waste production. Therefore, the object of the research is to non-waste production. The subject of the following research is the contents, efficiency and profitability of non-waste production. Thus, the aim of our work is to compare non-waste production in other countries with the situation in Belarus, where there have been attempts to introduce the technology, as well as to evaluate all prospects. To reach the core aim the following tasks are to be fulfilled: to analyze the influence of non-waste production on general productivity, to study the process of putting different types of non-waste technologies into operation.

The main field for the use of non-waste technologies is energy production, because energy is the most critical issue in today's world, as the main fuel resources are non-renewable. That's why Western countries have found a solution, which helps them to reduce the consumption of resources.

Non-waste production has been injected in Sweden. One example might be the following: biofuel is produced from potato and a carrot scrubs straw and bagasse. A few years ago such waste processing plant was built in Sweden. And this biofuel is used by buses, trucks, cars, and so on. Another example is connected with Swedish company Kährs which specializes in floor production. Those parts of the tree, which cannot be used for flooring, they turn into thermal energy, heating of industrial premises and the neighboring houses. Even the ash from the boiler is used as fertilizer in the local forestry. In the USA HP Company offered the use of organic waste generated during the operation of a dairy farm, and thermal energy, which is supplied by data centers to create a mutually beneficial, cost-efficient and cleaner production.

After reviewing all of the above, it may be noted that non-waste production is the key to solve many problems that will help to bring the industry to a new level. As we have previously mentioned, non-waste production is gradually appearing in Belarus. For example, in the Gomel region both technical and edible oil is produced from domestic raw materials, and cotton cake, which is formed during processing, is valuable protein feed for animals. As well as the building of JSC "Minskremstroj factory" completely renounced the use of gas in the manufacturing process and moved on local fuels. Sawdust and wood chips are enough to replace 1300 tons of gas. However it is necessary to widen the circle of usage of non-waste technologies. As Belarus is heavily dependent on energy supplies, many businesses can provide itself with energy. Companies' waste could serve as raw material for others, such as sawdust of wood furniture and woodworking enterprises can be used for the production of a second-rate paper.

Costs of waste technologies are minimal, since almost every company is able to recycle their waste, unused stocks of raw materials, semi-products and other products produced in the process of production or consumption. In this case we do not need to spend money on purchasing of resources, because the main resource - is waste, from which we deliver every day. Therefore, to begin waste-free production in the company, we need to pay only for the purchase of additional equipment for recycling. Thus, on the one hand, non-waste production allows the most efficient use of natural resources, fully recyclable waste in commercial products, and the other - to reduce the amount of waste and thereby to reduce their negative impact on ecological systems.

To sum it up, the guidelines for creating non-waste production are: environmentally safe preparation and complex processing of raw materials in combination with cleaning up harmful emissions and optimal use of energy, that allows a national economy to develop in accordance with international standards. Therefore, we can safely state that non-waste production is the future of the global industry.