

3. Застарілість продукту (технології).
4. Зміни законів і інших регуляторів.
5. Зміни системи цінностей і норм поведінки у робітників.
6. Зниження продуктивності організації.

Заважають:

1. Бюрократична жорсткість організації.
2. Невдачі у проведенні попередніх перетворень.
3. Опір і побоювання змін.
4. Суперечливість цілей.

На відміну від колишніх традиційних організацій, сучасні організації відповідають на виклики не стільки власної трансформації, скільки трансформації середовища. Особливість сучасного типу розвитку визначається тим, що починаючи з мінімального рівня інституціональної складності організації замість того, щоб руйнуватись під дією непередбачуваних факторів, вона виявляє здатність адекватно реагувати на них. Ця здатність є результат постійної інноваційної активності в технічній інституціональній і культурній сферах, що дозволяє компенсувати старі вичерпні ресурси цілеспрямованою заміною на нові.

Зміни є одними з типів розвитку підприємств. Менеджерам потрібно навчитись керувати змінами та розвитком, так як це є необхідною умовою успішного управління.

Отже, зіштовхуючись із необхідністю змін, треба враховувати ситуації у організації, час зміни й особливо персоналу. З цих даних необхідно вибирати той спосіб змін, який буде адекватний цій ситуації, і планувати етапи змін, максимально залучаючи до цього працездатний персонал.

POWER PLANTS AS RAW MATERIALS FOR BIOFUELS

Skudlarski Jacek, dr inż. Warsaw University of Life Sciences – SGGW, Poland

Zaika S.O., the senior lecturer Kharkov Petro Vasilenko state technical university of agriculture

Actual tasks facing the state, is the reduction of imported fuel - natural gas and oil - and finding their own alternative renewable energy while addressing environmental issues and the development of energy-saving technologies.

It is known that in five to ten years of proven oil reserves will be exhausted in 60-65 % production decline by 30-40 %, and the need to increase consumption. In addition, according to scientists, the world's proven natural gas reserves would last only 50-60 oil - 25-30 years. Therefore, more is needed to attract non-traditional sources of energy that are based on bioenergy feedstock.

Active increasing industrial production leads to environmental pollution (water, soil, air). Pretty dangerous and harmful to living organisms is environmental pollution with toxic substances, heavy metals, and emissions of industrial enterprises large amount of CO₂ cause great danger to the environment and lead to the creation of the greenhouse effect.

But in recent years both in the world and in Ukraine in particular, due to the rising costs of energy, more attention has been paid to biofuels produced from high-performance energy crops.

Energy production from renewable sources, including biomass is developing dynamically in most European countries. For example, the main raw material for the production of biofuels in Brazil's sugar cane in the US - corn (from 1 ton of corn silage can get 200 to 400 m³ of biogas). In European countries, and especially in Germany, is increasing production of biofuels from sugar beets.

One of the most promising alternative energy today is solid biomass organic origin, including plant, which is an environmentally friendly renewable energy. Biomass energy is equivalent to 2 billion. Tons of fuel per year, which is about 13-15 % of total primary energy use worldwide. The share of Ukraine, according to some estimates, is about 50 million. Of fuel, but economically viable biomass potential is estimated at 27 million tons of fuel per year.

Special attention is paid to the problem of the world's biomass to obtain biofuels. Biomass in energy can be used directly or by burning a fuel - after the previous processing diesel, ethanol or gas.

The source of energy resources can be a vegetable by-products (straw, sunflower hulls, corn stalks, etc.), the annual waste which up to 50 million tons and specifically designed for this power plant, the main absorbent carbon dioxide, reducing the quantity in the atmosphere. They form high yields of biomass that could be used for energy targets for bio-fuel production. Involvement of the potential for energy production can meet about 12-15 % of Ukraine's primary energy.

Power plants and harvest valuable high ruggedness to grow. In a relatively short period of time can produce large increases in biomass. In

terms of equivalent energy costs of growing such crops is much less than the cost of energy derived from traditional sources. The use of plant biomass provided its continuous renewal does not increase the concentration of CO² in the atmosphere.

The choice of a culture of energy depends on many factors: the type of soil, the location areas and access to water, type of terrain, etc. Also be sure to determine the timing and methods of harvesting, storage, processing and transportation, as well as economically feasible distance transportation of biomass fuels must not exceed 50 km.

Today, bioenergy is a promising area of agricultural production. Ukraine has all the conditions for a broad introduction and use of new technologies and the growing biomass energy crops. The development of bioenergy technologies reduce the problem of ensuring the country's energy resources, improve the ecological situation in the region, promote employment of local people. This will make it possible to transform the agricultural sector of the energy user directly to the manufacturer. Based on the current level of total primary energy consumption in Ukraine economic potential of growing biomass energy can provide about 10 % of the country's energy needs. The widespread introduction of plantations on low-energy crops and crop rotations derived from lands will increase the share of biomass in the energy balance of the country next year to 20-25 %.

Power plants affect the environment and the environment as follows:

- one hectare plantation plants absorb energy from the air more than 200 tones' of CO₂ for 3 years;
- ideal for planting contaminated land, low productivity, in terms of, growing crops;
- effectively used in the anti-erosion measures for strengthening soil enriched soil minerals and trace elements, nutrients naturally occurring;
- plantations power plants are natural filters for waste agricultural production, are used as buffer zones in areas of biological waste accumulation farms;
- energy plants are natural filters for cleaning soil from pesticides.

Therefore, to overcome the problem of Ukraine energy deficit, and the necessary and timely energy gained special attention because its solution requires finding alternative ways of energy supply. The use of energy crops should be considered strategic direction solution of energy problems.