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ECOLOGICAL INNOVATION MANAGEMENT ON THE INTERNATIONAL LEVEL

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Modern trends in the development of environmental management and protection in all countries of the world need innovative decision making and use of technologies in the sphere of "profitable ecology" (or "green" technologies) simultaneously satisfying the interests of producers, consumers and society, that is allowing to obtain a positive ecological, economic and social effect [1].

Ecological innovations include a coordinated set of modifications or new decisions for products (goods or services), processes, market approach and organizational structure leading to a company's image and competitiveness. This approach can help enterprises access new and expanding markets, increase productivity, attract new investment into the business and increase profitability [2].

The types of economic activity that are prioritized for the implementation of the mentioned technologies include, in particular, agriculture, forestry and the development of ecological infrastructure, energy generation and energy supply, industry, waste management, construction and housing, transport, water management, fishery, tourism [3].

According to the recommendations of UNEP experts and the world's leading experts in the field of environmental management, the following innovative decisions can be identified for priority types of economic activity: 1) agriculture: efficient use of water; wide use of organic fertilizers; complex control over pests, limiting the use of chemical plant protection agents; development of organic agriculture; cultivation of energy crops; 2) forestry

and development of ecological infrastructure: reproduction and protection of forests; increase in areas covered by forests; increasing the productivity of forests; increasing the number and area of objects and territories of the nature reserve fund; protection of natural landscapes and biological diversity; 3) energy generation and energy supply: use of renewable energy sources and technologies with reduced carbon emissions; diversification of fuel and energy resources, increased use of domestic, primarily local, resources; diversification of importers of fuel and energy resources; saving energy resources during energy production and energy during energy supply; 4) industry: increasing energy efficiency; reduction of harmful emissions and waste; 5) waste management: prevention of waste generation; reuse of materials; obtaining energy from waste; safe disposal of waste; 6) construction and housing: increasing the energy efficiency of new and existing buildings and structures; 7) transport: use of energy-efficient types of transport; use of fuel with low carbon emissions; transition to more environmentally efficient modes of transport; 8) water management: improvement of water purification and water consumption systems; saving water; improvement of used water purification technologies; 9) fishery: reduction of fish catch, prevention of fish resources; replacement of vessels; 10) tourism: development of rural and ecological tourism.

In agriculture, the level of agricultural development and the level of land plowing, as well as the level of use of mineral fertilizers, need to be regulated. Preference should be given to the wide application of organic fertilizers, which will contribute to the restoration of humus.

As for organic farming, the number of enterprises that grow organic products is constantly growing in the world. Worldwide, there are 22 countries with an organic share of total agricultural lands of 10% or more in 2023. Liechtenstein has the highest share at 44.6%. Austria obtaines the second place with 27.3% and Uruguay is the third in the world with 25.4%. In European Union 14 countries have an organic farmland share of at least 10%. Austria (27.3%) has surpassed the 25% mark. EU average level of organic farming lands reached 11% of total agricultural land in 2023. Organic farmland occupied 98.9 million hectares in the world in 2023. That is 2.6% (2.5 million) more than in 2022. 2.1% of the world's farmland is organic. Largest increases there were in Uruguay, China and Spain [4].

As for forests, priority should be given to the growth of forest cover in the territory, as well as wood harvesting, mainly when felling for the formation and improvement of forests. The area of forest regeneration should exceed the area of felling for main use, preferably not less than twice. It is also worth limiting forest losses due to unauthorized use. Special attention should be paid to the protection of evergreen tropical forests supplying oxygen for the entire planet.

As for the nature reserve fund, the aim of this activity is to increase the share of nature reserve territories and to reserve the biological diversity. In addition, it is necessary to create a network of ecological corridors that will ensure the migration of animals between the objects of the nature reserve fund.

Energy generation and energy supply are represented by the production and supply of electric and thermal energy, as well as the production and sale of fuel and energy resources. A positive shift in this area can be considered the increase in electricity production by hydroelectric power plants and especially the emergence of alternative types of power plants (wind and solar), which are safe for the environment and economically profitable due to the introduction of a "green" electricity tariff.

Solar power generation needs effective energy storage systems to ensure a stable and reliable energy supply. Innovations such as advanced battery technologies, including lithium-ion batteries and flow batteries, have greatly improved the storage capacity and efficiency of solar energy systems. These storage solutions enable the capture and storage of excess solar energy during peak production periods, which can then be utilized during periods of low or no sunlight [5].

An important direction in the development of alternative energy should be considered the introduction of wind power plants and small-capacity solar collectors into domestic serial production, allows each state to get new jobs and facilitate access to this technology for owners, primarily of private houses, as well as apartment buildings.

The use of organic materials in thermal energy is also promising, but it is worth noting that a balance must be maintained between the formation of organic energy carriers and their use, because otherwise the destruction of forests will be observed for the use of wood as a raw material for the generation of thermal energy. In this regard, the cultivation of energy crops seems very promising.

As for waste management, an increase in the rate of waste utilization and a decrease in the rate of removal to places of unorganized storage are positive in this area. Prevention of waste generation and disposal of existing waste is also of great importance. The accumulation of hazardous waste should be as small as possible, and the use of technologies for their disposal should be as wide as possible.

As for transport, the transportation of goods over long distances is carried out by less expensive and more environmentally friendly modes of transport – railway and pipeline. At the same time, the global trend is the increase in vehicle mileage when transporting goods, indicating, on the one hand, a fuller use of the possibilities of road transport, and on the other hand, an increase in environmental pollution: air, soil in the roadside lane, as well as groundwater.

Therefore, road transport is more mobile and convenient, but the expansion of its use leads to wear and tear of roads and an increase in environmental pollution. Thus, in the transport sector, the expansion of the use of environmentally safe transport remains relevant: railway and pipeline – for freight transport, and railway and electric transport (tram, trolleybus, metro) – for passenger transport. Arrangement of parking lots at the entrance to cities to intercept motor vehicles, arrangement of bicycle paths inside cities and use of electric vehicles are also relevant.

The low level of water losses can be considered positive in water supply, as well as a significant excess of the volume of circulating and repeated water supply over the volume of fresh water intake. As for water drainage, it is worth introducing new highly effective technologies for saving water and cleaning it wi the aim to increase the level of environmental safety.

The development of ecological tourism will contribute both to the increase of the ecological culture of the population and to the growth of income from the implementation of tourist activities. A mandatory requirement for its development is the prevention of damage to the recreational potential and natural capital. A prerequisite for the development of ecological tourism is the increase in the number and area of objects of the nature reserve fund. The development of rural and ecological tourism is interconnected, since the availability of nearby places of residence in the form of agrarian estates greatly contributes to the implementation of hiking, horseback and bicycle trips.

Thus, the world is gradually adopting and implementing innovative solutions that allow the development of environmentally safe and energy-efficient technologies in various types of economic activity. At the same time, the development of innovative activities in the field of nature management and environmental protection is carried out rather unevenly, and in many countries there are significant reserves for improvement in comparison with the developed countries of the world. In order to increase the pace of innovative development in this area, it is necessary to create an organizational and economic mechanism that would facilitate the application of such technologies at both the state and local levels. This will make it possible to gradually build an ecologically oriented society and ensure the sustainable development of territories on a global scale.

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ПРОБЛЕМАТИКА ПІДГОТОВКИ АРХІВІСТІВ У ЗАКЛАДАХ ВИЩОЇ ОСВІТИ В УКРАЇНІ НА СУЧАСНОМУ ЕТАПІ ЯК ПРЕДМЕТ НАУКОВИХ ДОСЛІДЖЕНЬ

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Актуальність нашого дослідження визначається необхідністю запровадження нових підходів щодо збереження документальної історико-культурної спадщини України в умовах війни, яка зберігається в державних архівних установах. Цей факт обумовлює оптимізацію професійної підготовки нового покоління архівістів у закладах вищої освіти (бакалаврського та магістерського рівнів). На думку В. Бездрабко «...наразі архів потребує фахівця, котрий би володів універсальними гуманітарними, природничо-технічними, соціально-економічними чи управлінськими знаннями і був готовий ініціативно реагувати на неминучі виклики сучасності...[3, с. 62].

Потребу в ній підтверджують: Закон України «Про національний архівний фонд та архівні установи» (1993р.), Стратегія захисту документальної спадщини як запорука збереження національної ідентичності та державності на період до 2027 р. (схвалено розпорядженням Кабінету Міністрів України від 24 грудня 2024 р. № 1349-р.) та Програма оцифрування архівних інформаційних ресурсів