## **ECOLOGY OF EUROPEAN UNION**

## Prof. dr. Rajko Kasagić, e-mail: prof.rajko.kasagic@gmail.com International University Travnik in Travnik, Bosnia and Herzegovina

#### **Article review:**

Summary: The ecological environment is the main challenge for the accession of European countries to join the European Union. Ecology is at the heart of the policy-making process of European countries, respecting the interests of companies and consumers. Due to the low level of environmental awareness of European countries, which are not members of the European Union, enlargement with new members can slow down or even set the European Union back when it comes to ecology. The reasons are: underdeveloped environmental policy, low gross domestic product. The European Union invests its funds for the environment, but countries are obliged to allocate most of the funds from their gross domestic product. Therefore, special taxes are introduced on the consumption of certain products for the protection and preservation of nature. Taking significant environmental measures will have an impact on protection against ozone depletion and global warming. A healthy environment creates the conditions for a healthy life. Therefore, an appropriate ecological awareness is necessary, which is a pattern of life, harmonizing behavior with the natural laws of the circulation of matter, energy expended and the renewal of life, which encourages taking from nature as much as necessary. Ecological ethics is the ecological relationship of man to the environment, which establishes a moral relationship between the human / technosphere and the natural / biosphere. A new attitude towards the environment as well as a transformation of the spirit of the modern sphere of work is becoming an imperative, a concept of sustainable development with the harmony of different economic and social relations.

Keywords: Ecology, European Union, candidate countries, companies, consumers, awareness

#### **Goal Setting**

The European Union national and governments have set clear goals for shaping European environmental policy by 2020, linking a vision of what will be achieved by 2050 based on search engines, legislation and funding: Transition to a resource-friendly, green competitive low-carbon business, -Protecting citizens from pressures and threats to their health and environmental well-being. Much is being done in the European Union to protect endangered species and natural areas in the European Union, to guarantee the safety of drinking and bathing water, to improve air quality and waste disposal, and to reduce the participation of harmful chemicals. Environmental protection and eco-innovation help create new business opportunities and employment opportunities that encourage new investments in ecology. The basic foundation of the European Union's policy is green growth, because economic growth must be environmentally sustainable. The European Union also has a key role to play in promoting sustainable development at the global level.

Environmental protection is one of the key conditions for joining the European Union. The European Union deals with water, air and soil quality in a special chapter. Success requires a collective effort to meet all the goals set in that chapter. That is why the "look around" campaign was launched.

European Union standards in environmental protection are the highest in the world. The directive banning the most commonly used disposable plastic products in order to dispose of plastic waste, which pollutes hundreds of tons of European seas every day. Approximation to the environmental standards of the European Union requires the harmonization of the regulations of the nation states with the regulations of the European Union, but also to change the practice. The demands are numerous and require diligence, perseverance and legality. The issue of waste must be resolved and its disposal in appropriate places that will not endanger the air, land and water to citizens. Wastewater and air are added to that. Measures in this area will especially include industrializations and businessmen.

Obligations are important in education, not only for citizens but also for those who will be in charge of implementing and controlling what obliges us to achieve environmental goals. Harmonization of legal acts is an obligation, and negotiations on deadlines for the application of these regulations can take decades after accession to the European Union.

Achieving the set environmental goals is done through appropriate professional and educated administrative staff and appropriate capacity with the necessary equipment. Appropriate staff of administrative and public companies must be trained to apply environmental legislation, but also to control their application.

The main goals of the European Union's environmental policy are the preservation of natural values, the promotion of a resourceefficient economy and the care of public health. Environmental policy is multisectoral, it needs to be integrated in the creation and implementation of all policies and activities of the Union, primarily in promoting the principles of sustainable development.

The European Union pays special attention to the issue of combating climate change and has allocated about 20% of the Union's budget for this area for the period 2014-2020. The goals for achieving the New Framework for Climate and Energy Policy by 2030 have been set. reduction of greenhouse gas emissions by 40% compared to 1990. The main instruments for combating climate change are decarbonisation, increasing the use of renewable energy sources and energy Decarbonisation implies efficiency. а substantial change of the practical-political paradigm, a decisive reduction of fossil fuels and an increase of the energy independence of the European Union in relation to the base year 1990. Climate change policy has been accompanied by the improvement of standards related to the work of industry, especially in sectors that provide a significant source of pollution.

## Ecological programs

The first environmental project of the European Union (1973 - 1976) defined the principles and goals of environmental policy. The goals were based on reducing pollution, improving the quality of life and improving

international cooperation to protect the environment. In addition to the objectives, the principles determine the direction of action to protect the environment on the basis of which pollution and the negative consequences of pollution should be prevented at the source by predicting environmental effects. negative To encourage research that activity in one Member State cannot cause environmental damage to another Member State, the public must be informed and educated about environmental protection.

In the period from 1977 to 1981, the operation of the first program was continued by the Second Environmental Program. It places special emphasis on the rational management of resources and focuses more on preventing water, air and forest pollution. The third environmental program (1982-1986) also established cooperation with developing countries with the aim of solving emerging problems in environmental protection, noise reduction, waste management and the promotion of environmental technology.

The Fourth Environmental Program (1987-1992) strengthened the field of environmental protection in the field of agriculture and transport, creating conditions for the production of healthy food and the reduction of air pollution by means of transport.

The fifth environmental program (1993-2000) for the first time defines the concept of state development that must take place in the direction of nature protection (man, land, water, air, forest). Excessive pollution of nature in the process of creation of material goods must be stopped, even by banning the production of these material goods. The means for the production of material goods must be of such a technological level that they automatically stop working if they catch a part of a man or his clothes, which would endanger his life or injure him.

The Sixth Environmental Program (2001-2010) defined future priorities in strategic activities such as: improvement of existing laws, closer cooperation on the market, integration of bodies or institutions involved in environmental policy, assistance to citizens in changing behavior and environmental protection planning.

For the current state of environmental protection in the European Union, the most important is the Seventh Environmental Program, which included a series of programs for action until 2020. The goals are:

- The European Union must be transformed into a green economy (low-value production) with low CO 2 emissions (carbon dioxide or carbon IV oxide), - Protecting Union citizens from environmental pressures and threats to their health and well-being, - Increasing the benefits of Union legal acts in the field of nature protection, - Increasing environmental knowledge and expanding the evidence base for better policy coherence, - Securing investments for nature protection and climate change, - Increasing issues and their involvement in environmental protection, -Improving the sustainability of cities in the area - Increase the effectiveness of the Union in addressing international environmental climate challenges. The seventh and environmental program gives priorities to: -Increasing the growth of production with a low percentage of CO 2, - Reducing the danger to human health and well-being, principles Climate change. The of environmental policy are based primarily on anticipatory measures. elimination of obstacles to prevention, payment for ecology (tax increase) as well as incentives to avoid nature pollution, active action and taking preventive measures, and preparation of action programs.

## Legal Regulations

The European Union has adopted a number of legal acts and programs aimed at protecting the environment (water, land, air and health).<sup>1</sup>

The Large Combustion Plants Directive and the Industrial Emissions Directive contribute significantly to reducing air pollutant emissions.

<sup>&</sup>lt;sup>1</sup> Analysts mention 200 legal acts that each member must apply to protect the environment.

In the process of creating environmental policy, the European Union takes into account the latest scientific achievements and available policies, supports the use of the best available technologies, taking into account the regular differences and specifics of different regions.

The basic policies of the European Union are: precaution, prevention, suppression of pollution at the source in principle, "polluter pays". Environmental policy-making implies respect for fundamental rights and the right of the public to participate in this process. The European Union is a signatory to the Archives Convention, the implementation of which is achieved through the secondary legislation of the European Union.<sup>2</sup>

The EU environmental acquis includes horizontal legislation, air quality, climate change, waste management, water management, nature and biodiversity protection, industrial pollution control, chemical control, genetically modified organisms (GMOs), noise management, civil protection and cooperation with third countries. Therefore, the process from the aspect of environmental protection must be realized by the right to access information, public participation in decision-making, responsibility through judicial protection.

Member States are not prevented from introducing measures that are stricter than those established by European Union legislation as long as they are contagious with its overall objectives and the principles of the single market. Such an approach in creating and implementing this policy is a special challenge for a country preparing for membership in the European Union.

In 2005, the European Parliament adopted the Energy - Uising Producte - EuP Directive, which aims to encourage the prevention of the negative impacts of complex industrial products in the development phase. It represents а framework for setting criteria from the domain of ecological orientation of designing products that consume energy in

the experiment phase. The content of the Directive is a real legal space for the elimination of unsuitable elements and the creation of conditions for suitable ecological design of certain types of production. The Directive has defined the conditions and criteria for the establishment of appropriate implementing measures and requirements relating to the environmentally relevant properties of products (energy consumption) and the possibility of their effective improvement. The Directive affects the improvement of production quality, environmental protection and the activation of market mechanisms as a guarantor of the sustainability of the concept it promotes. The immediate objectives of the Directive are: - Exemption of free distribution of products that use energy on the territory of the European Union, - Improvement of ecocharacteristics of products and quality of the environment, - Rational use of energy.

The directive encourages producers to have a long-term impact on energy protection, leaving room for active implementation of measures for specific product groups and specific aspects of environmental load (energy consumption, waste generation, water consumption, extension of product life) according to environmental impact assessment.

The process of effective implementation of the Directive is assessed on the basis of a stakeholder consultation that brought together representatives of industry, Member States and non-governmental organizations. implementation measures Specific are adopted for each specific type of product under the control of panel experts from all EU member states. The measures to be decided define the energy characteristics of each product, as well as the marking of the quality of the market for which the manufacturer opts.

The product covered by the implementing measures must be marked with the CE mark which is placed on the market. This mark

<sup>&</sup>lt;sup>2</sup> There is a landfill on the bank of the Lim in Serbia, whose waste reaches the river Lim, through the river Lim dirty water from the waste penetrates into the river Drina, and then into the Sava. Therefore, in order to be able to change in ecology, it is necessary to

educate citizens at the beginning of preschool age, to introduce the subject of ecology, ie environmental protection, in educational institutions, and then severe penalties for violating environmental regulations.

confirms that the product complies with European Union regulations.

The Restriction of Hazardous Substances Directive (RoHS 1) was adopted in February 2003 with the aim of harmonizing the regulations for the use of hazardous substances in the European Union. In implementation and application it is complete with the WETEE directive. The RoHS 1 Directive restricts the use of toxic substances, primarily heavy metals, in all electrical and electronic devices that came on the market after 1 July 2006, ie with the entry into force of this Directive. The directive restricted the use of six hazardous substances in the production of different types of electronic and electrical equipment. Each Member State, whether it has adopted executive implementation mechanisms, will use the Directive as a guideline and platform. Directive 2011/656 RoHS 2 represents the evolution of the RoHS Directive 1. Namely, the RoHS Directive 1 did not apply to medical equipment monitoring equipment. The new RoHS2 Directive puts this exception out of force. It applies to the same substances as the original Directive with more precise regulatory requirements and a clearer interpretation of the requirements. Periodic reevaluations are prescribed to facilitate the gradual coverage of additional electronic equipment, cables and spare parts. The compliance of the product with the RoHS 2 Directive is shown by the CE mark on the product, and the key document entitled "Declaration of Conformity" is precisely defined by the new Directive. From the beginning of the application of RoHS 2, all member states of the European Union are obliged to comply with the new regulations. The difference between the basic and the revised Directive is in the proof of compliance with the requirements and the lack of conditions for the application of the requirements in production prescribed according to the provisions of the new Directive. The RoHS Directive does not apply to static industrial tool installations, but it does apply to all relevant products on the European Union market, whether they are manufactured within the single market or imported.

Products covered by the RoHS Directive must keep the manufacturer's address and the

corresponding serial number in addition to the CE mark. Detailed information on the conformity of products with the Directive can be obtained from the "European Union Directorate for Conformity for Product". Participants in the supply chain must keep documentation showing compliance with the requirements - technical documentation or technical file.

WEEE Directive The Weste Electrical and Electronic Equipment Directive entered into force in 2003, obliging Member States to establish a system for the collection of obsolete electrical equipment by 13 August 2005, which includes the collection, recovery and recycling of relevant products. . From the consumer's point of view, the established system implies access to public recycling services in specially designated centers where they can hand over their obsolete and unusable devices without paying a deposit fee. The WEEE Directive has been supported by manufacturers in their efforts to design and manufacture appliances, and in addition to facilitating circulation, it achieves and promotes the extension of the service life.

The primary objective of the Directive is to minimize the disposal of electrical appliance residues as unsorted municipal waste and to achieve a high level of separate collection. The members of the European Union are obliged to establish a system for the separate collection of appropriate devices from end users. The European Commission has prescribed the initial amount of collected electrical waste (4 kg per capita per year).

The Energy Liberation Directive was adopted in 1992. It was first audited in 2010. with the basic goal of improving efficiency and reducing energy and reducing gas emissions. It is only with the amendment of Directive 20014 that energy efficiency in the European Union has improved, and by 2030 it must be 27%, reducing greenhouse gas emissions by 40%.

Increased energy use contributes to the protection of the human environment and the achievement of an affordable price, which requires a review of the regulatory framework for energy infrastructure, including the TEH - E Regulation (Trans - European Energy Network Regulation). This framework should encourage the increase of innovative technologies and infrastructure.

# Candidate Countries for membership in the European Union

The process of integration of new European countries into the membership of the European Union is very complex and longlasting, especially countries that have a lower gross domestic product, and even habits for preserving the environment. The previously stated regulations of the economic character of the European Union confirm that. The issue of social policy among the members of the European Union is of great importance. The question is how to prevent the relocation of labor from poorer members and the search for jobs in richer members. The Amsterdam Treaty agreed to include a chapter on social policy, followed by a chapter aimed at "high levels of employment and social protection". The Maastricht Treaty gave foreign policy in much stronger contours, joining the security segment, which the member states are obliged to actively and unreservedly support in the spirit of loyalty and mutual solidarity. cooperation is Systematic based on consulting and taking common positions and coordinated action. Joint action may be taken when the Council of the European Union decides, on the basis of guidelines from the European Parliament, that an issue should be resolved by joint action. Joint actions can also be taken by engaging a rapid reaction force as a separate wing of NATO forces. Bosnia and Herzegovina has not been legally barred from joining NATO forces as Austria has been.

The process of integration in the field of environment takes place in three areas: harmonization of regulations, building of administrative capacities and capacities in the field of environmental protection institutions, as well as provision of financial resources. Therefore, this chapter is extremely demanding in financial and administrative terms, especially in terms of a well-equipped and trained judicial and administrative profession. European Union legal acts for the Western Balkans:

- European Green Agreement, - European Investment Plan, - Guidelines for the implementation of the Green Agenda, - Sofia Declaration on the Green Agenda for the Western Balkans.

Prior to joining the European Union, candidate countries are obliged to: Strengthen the Environmental Protection Agency by improving administrative and financial capacity, - Provide adequate resources for the Green Agreement, -Improve coordination between institutions at central and local level, - Strengthen law (landfill closure) enforcement noncompliant), - Invest in waste separation and quality recycling, \_ Strengthen air monitoring, - Improve riverbed management, Prepare for the European Ecological Network, - Implement the Paris Treaty, which includes the adoption of а comprehensive strategy to tackle climate change which will be in line with the European Union framework for climate and energy policies, - Achieve good integration in all relevant sectors.

# Global environmental problem and participation of the European Union

The global environmental problem requires a solution at the international level. Dissemination of environmental awareness has a general approach everywhere in the The European Union actively world. participates by adopting its regulations and implementing international ones in the environmental field. The Green Agreement for the European Union and its citizens confirms its commitment to facing the challenges of climate and the environment, which is the main task of this generation. Every year the atmosphere becomes more and more polluted and the climate changes. Of the eight million species on the planet, one million are endangered. Forests and oceans are being polluted.<sup>3</sup>

natural resources for the future we want; European Environment Agency - State and Outlook 2020; Knowledge and transition to a sustainable Europe by introducing the concept of clean energy within the economy, industry, production and consumption, large infrastructure, transport, food and agriculture,

<sup>&</sup>lt;sup>3</sup> Sources: Intergovernmental Panel on Climate Change (IPCC). Special report on global pollution up to 1.5 degrees Celsius. Intergovernmental Scientific-Political Platform for Biological Equality in Ecosystem Services for 2019; International Resource Panel; Outlook in terms of global resources for 2019,

The European Green Agreement provides solutions to many issues from the ecosystem. It represents a new growth strategy that seeks to transform the European Union into a just and promising society with a modern competitive economy based on efficient and economical consumption of resources, where in 2050. there will be no net greenhouse gas emissions and where economic growth is not linked to resource consumption. The new strategy seeks to preserve, increase and protect natural capital and the health and well-being of citizens from environmental risks and the impact of the environment on them. That transition must be fair and inclusive. In the first place, the citizen must pay attention to the regions, industry and workers who will face the biggest challenges. As significant changes take place, active public participation and confidence in the transition are crucial for policies to be successful and acceptable. The European Union has a collective ability to transform its economy and society to make them sustainable. It can have a significant impact on climate and environmental measures, consumer protection and workers' rights. Large public investments require that private capital be directed to action in the field of climate and environment. The European Union must be at the forefront of coordinating international efforts to build and harmonize a financial system that fosters sustainable European Green Agreement solutions by accelerating the process and providing the basis for the transition needed in all sectors.

The causes of climate change and the loss of biodiversity have a global character and therefore go beyond national borders. The European Union can use its resources to regionally accept environmental protection and adapt national legislation to European Union standards. The Green Agreement is an integral part of the strategy of the Commission of the European Union for the implementation of the United Nations Program until 2030 with the aim of sustainable development and other priorities announced in the political guidelines of President Ursula von der Lejen.<sup>4</sup>

Through the Green Agreement, the Commission will reorient the macroeconomic coordination process within the European Semester to integrate the United Nations Sustainable Development Goals, and place the center of economic policy and sustainable development goals at the heart of United Nations policy-making and action.

In achieving the goals of the Green Agreement (plan), it is necessary to invest effort and activities to avoid discrepancies between economic and social goals and environmental goals. It is crucial to give greater importance to the protection and restoration of natural ecosystems, sustainable use of resources and better health of citizens. In order for the European Union to maintain its competitive advantage in the global ecosystem, it needs to increase the widespread use and representation of new technologies in all sectors of the single market, and create new innovative value chains. This challenge goes beyond the capabilities of individual nation-states. Horizon Europe, in synergy with other European Union programs, will play a key role in aligning national public and economic investments. At least 35% of the Horizon Europe budget will be used to finance new solutions to combat climate change that are important for the implementation of the European Green Plan.

The complete package of instruments available under Horizon Europe will support the necessary research activities and innovations of the Green Agreement Mission in order to achieve large-scale changes in the field of adaptation to changing climatic conditions. Partnerships with industries and Member States will support research and innovation in the field of transport including carbon content, cycling sectors, clean hydrogen power, low carbon steel

construction, taxation and social benefits. In order to achieve these goals, unity is needed in giving greater importance to the protection and restoration of natural ecosystems, sustainable use of resources and better health of citizens. In this area, transformation is the most needed and potential beneficiary for the

economy of the European Union, the natural environment, digital transformation.

<sup>&</sup>lt;sup>4</sup> Political guidelines for the next Commission (2019-2024) "A more ambitious Union: My plan for Europe".

production, bioenergy based energy sectors. The knowledge and innovation communities within the European Institute of Innovation and Technology will continue to deepen cooperation between higher education institutions, research organizations, companies in the field of climate change, sustainable energy, food for the future.

### **Educational activities**

The European Commission is preparing European Competence Frameworks to help develop and change knowledge, skills and attitudes and climate change in sustainable development. Schools, training institutions and universities are in a position to work together on the changes that need to be made in order to achieve a successful transition. The European Commission is providing new funding to make school buildings and work schools sustainable under in the environmental protection program. To this end. cooperation with the European Investment Bank has been strengthened, stronger links have been created between the Structural Funds and new financial instruments in order to provide sufficient funds for investment in school infrastructure. Investments in educational institutions for the purpose of training on the importance of nature protection are returned many times over (green areas, clean air, unpolluted land, clean water ensure a healthy life for citizens). The invested funds will not be important for the protection of the ecosystem if each person is not personally engaged in changing their consciousness, especially in developing countries, where there is great relaxation and indolent behavior towards nature.

If we investigate the issue of environmental protection in Bosnia and Herzegovina, we will see that it is at the bottom of the scale in terms of awareness and behavior of citizens. Research shows that excessive deforestation in the Amazon Basin could lead the region into new climatic conditions by turning tropical forests into savannas. Education does not include training of citizens on the protection of the human environment and all resources that exist in that environment, but also training on the consequences if the ecosystem is disrupted, followed by severe penalties for violating the rules of conduct towards the ecosystem.

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