10.1515/cer-2016-0013

ZOFIA WYSOKIŃSKA*

The "New" Environmental Policy Of The European Union: A Path To Development Of A Circular Economy And Mitigation Of The Negative Effects Of Climate Change[1]

Abstract

This paper analyses the evolution of the new environmental policy of the European Union in the context of the efforts undertaken to moderate the negative effects of climate change. It describes all the activities in the European Union designed to implement new tools of the EU environmental policy, such as low carbon economy technologies, tools that improve the efficiency of managing the limited natural resources, the environmentally friendly transport package, etc. All of them are aimed at laying the foundations of the circular economy, which may also be referred to as a closed-loop economy, i.e., an economy that does not generate excessive waste and whereby any waste becomes a resource.

Keywords*: EU's new environmental policy, climate change, circular economy*

1. Introduction

Environmental quality is considered central to health and well-being. Since the 1970s, the European Union (EU) and its member countries have introduced laws to ensure the careful use of natural resources, to minimise adverse environmental

* Ph.D., Full Professor at the University of Lodz, Faculty of Economics and Sociology, Department of World Economy and European Integration, e-mail: zofwys@uni.lodz.pl

[1] This article supported by a grant from Norway through the Norway Grants and co-financed by the Polish funds.

impacts of production and consumption, and to protect biodiversity and natural habitats. Based on Title XX of the Treaty on the Functioning of the European Union, EU environment law covers aspects as wide-ranging as waste management, air and water quality, greenhouse gases and toxic chemicals.

The EU integrates environmental concerns in its other policies, e.g. transport and energy, and is a major global force in pushing for tighter environmental standards and for effective action against climate change.

2. Goals and principles of the European Union's new environmental economy

In 2007[2] European Commission launched new steps with respect to developing an environmental policy aimed at accelerating the so-called 'climate package', taking into account changes in the 'old' energy sector based on non-renewable energy resources, mainly fossil fuels (coal), and increasing the share of renewable energy sources in Europe. The EU's new environmental policy is founded on the assumptions of the Renewed Sustainable Development Strategy of the European Council prepared in June 2006, which integrated the main economic, social, and environmental aspects and identified seven priority aims and actions:

- climate change and clean energy,
- sustainable transport,
- sustainable production and consumption,
- conservation and management of natural resources,
- public health,
- social cohesion, demography, and migrations,
- global poverty and sustainable development challenges.[3]

The European Commission also published a supplementary document which laid down new State aid rules for environmental aid, which provide higher guarantees in order to ensure higher levels of environmental protection than those attainable without such aid. However, the positive effect of such aid must be higher than the negative consequences connected with the distortion of

[2] Communication from the Commission to the Council and the European Parliament of 2 July 2008 "2007 Environment policy review" [COM(2008) 409 final – Not published in the Official Journal].

[3] http://ec.europa.eu/sustainable/welcome/index_en.htm

competition, taking into considering the "polluter pays principle – PPP."[4] In the other areas of environmental protection, covered by the 6th Framework Programme, most provisions were maintained. The main priority directions, with respect to which legislative acts were adopted, concern: **seven thematic areas: air, protection against pollution through recycling, the maritime environment, soils, pesticides, natural resources, and the urban environment.** The Industrial Emissions Directive was also implemented[5] together with Environmental Liability Directive,[6] according to which the polluter is liable for environmental damages and is obliged to remedy them. The latter Directive has given rise to the following two regulations:

- the first, on the control of transboundary movements of hazardous wastes and their disposal, meant that the provisions of the Basel Convention,[7] which entered into force in 1994,[8] have been incorporated into EU legislation;
- the second, prepared by the European Chemicals Agency, updated the Regulatory framework for the management of chemicals (REACH) and creating a uniform system for the registration, assessment, and evaluation of chemicals to ensure the protection of human health and the environment, taking account the need to maintain competitiveness and reinforcing innovation in the European chemical industry.[9]

In order to develop and modernise the regulations of the EU environmental policy, a new financial component – LIFE+ – was created for the period 2007–2013. Its objective was to streamline sustainable growth and environmental protection into

[4] Community guidelines of 1 April 2008 on State aid for environmental protection [Official Journal C 82 of 1.4.2008]; http://europa.eu/legislation_summaries/environment /general_pro visions/ev0003_ en.htm

[5] Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control, http://europa.eu/ legislation _summaries/en vironment/air_pollution/l28045_en.htm

[6] Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage; http://europa.eu/legislation_summaries/environment/general_provisions/l28120 _en.htm

[7] Council Decision 93/98/EEC of 1 February 1993 on the conclusion, on behalf of the Community, of the Convention on the control of transboundary movements of hazardous wastes and their disposal (Basel Convention), http://europa.eu/legislation_summaries/ environment/waste _management/ l28043_en.htm

[8] See also Community regulations: Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community., Regulation (EC) No 1013/2006 of the European Parliament; and of the Council of 14 June 2006 on shipments of waste; http://europa.eu/legislation _summaries/environment/waste_ management/l11022_ en.htm

[9] http://europa.eu/legislation_summaries/institutional_affairs/institutions_bodies_and _agenc ies/ l21282_en.htm

all the EU policies in the Member States and in EFTA countries, in countries which are members of the European Environment Agency, in the EU candidate countries, and in some third countries, especially in Western Balkans, i.e., in the countries that are parties to the Stabilisation and Association Process. Funds may be granted to public and private institutions. The programme includes three thematic components: "Nature and biodiversity", "Environment Policy & Governance", and "Information & Communication".[10]

The European Council summit on 8–9 March 2007 adopted the Action Plan integrating the Community climate and energy policies in order to reduce the average global temperature by more than two degrees Celsius by 2020 in comparison to the level from the period before industrialisation, and to reduce the threat of price increases and limited access to oil and gas. This means:

- reduction of greenhouse gas emissions until 2020 by at least 20% compared to 1990,
- rational use of energy and, as a result, reduction of energy consumption by 20%,
- increase the share of renewable energy to 20% of the total consumption of energy in the EU in 2020,
- at least 10 p.c. share of biofuels in the sales of transport fuels in 2020.

3. Support for environmental innovation

Environmental innovation includes all forms of innovation leading to significant and visible progress in accomplishing the goal of ensuring sustainable growth while limiting environmental impacts, increasing resistance to pressure exerted on the environment, or improving efficiency and accountability when it comes to the use of natural resources. Such technologies and industries that use them already represent a vital part of the EU economy. However, with the exception of renewable energy environmental innovation solutions are finding their ways into the market rather slowly. Obstacles to their development include, e.g., market prices, which do not fully reflect costs and benefits connected with environmental protection, as well as incentives and subsidies favouring the maintenance of environmentally unfriendly practices and petrified economic structures. The EU programmes offer assistance for financing environmental

[10] Regulation (EC) No 614/2007 of the European Parliament and of the Council of 23 May 2007 concerning the Financial Instrument for the Environment (LIFE+); http://europa.eu/legislation_ summaries/environment/general_provisions/l28021_en.htm

research and innovation. To encourage a wider application of environmental technologies, the EU promotes 'green public procurement', the pricing of products based on their life cycle, and their environmental labelling.

3.1. Financing environmental protection

Support offered to help attain the goals connected with environmental protection constitutes a vital part of the EU budget. By combining environmental policy with other political strategies, the EU may allocate, in total, EUR 10–12 bln from the budgets for agricultural and environmental objectives, support to the cohesion policy, as well as research and innovation.

The LIFE programme, established in 1992, is the major EU instrument that supports environmental policy. Its name comes from the acronym of the French title of the programme: L'Instrument financier pour l'environnement (Financial Instrument for the Environment). As the years progress, the programme is more and more focused on aspects connected with the protection of nature and the environment. Funds of the LIFE programme are used to support strategies connected with issues like increasing biodiversity and loss of habitat, effective use of resources, and preventing climate change.

Projects under the LIFE programme focus on practical initiatives, innovation, and promoting best practices at the local level. They have changed the way in which political decision makers, stakeholders, and society think about the environment and how they operate, requiring them to observe the principles of environmental protection. Environmental policy aims at balancing our need to develop with the use of natural Earth resources and the duty to leave a clean legacy for future generations.

This means that environmental policy strives to strike an environmental balance. Economic sectors, such as industry, agriculture, fisheries, transport, energy, and spatial planning have a significant environmental impact and, at the same time, depend on healthy eco-systems. A sustainable environment means we ensure that these sectors continue to deliver the services needed by citizens without degrading the natural environment we all depend on. Environmental protection is fundamental for future generations. To secure a good life in the future, we need to act now and protect the environment by giving it enough space to regenerate and allow for the continuous provision of clean air and water to citizens.[11]

[11] A healthy and sustainable environment for future generations; http://europa.eu/pol/env/index_en.htm

Natural resources are indispensable in order for the economy and the environment to function and co-operate properly. Unfortunately, the times when access to cheap resources seemed unlimited – a fundamental element of the economic progress accomplished during the last two hundred years – are gone. The vastly increased population and increasingly higher standard of living create an increasing demand for the natural resources on which we all depend, such as metals, minerals, and food. This is why they are becoming ever scarcer and their prices are increasing. By the end of the next decade and additional two billion people in developing countries will have an income equivalent to that of the middle class and they will also aspire to the lifestyle we live.

To face the challenges, the European Commission made the efficient management of resources one of the priorities in its major political strategies. This means creating higher value while using fewer raw materials, engaging in the sustainable use of resources and their more efficient management. It requires innovation, modifications in production and consumption patterns, and adequate incentives and price signals.

At the end of 2011 the governments of the EU Member States adopted the "Action plan for a resource-efficient Europe". Its authors drew attention to the need for major changes that must take place in the economy, politics and in the behaviour of each of us. The plan includes many stages which will unfold in various policy areas within the next 40 years and will lead Europe towards an economy that ensures a high standard of living, with visibly reduced effects to the natural environment.

The need to efficiently manage the limited resources is a priority in all EU political strategies. To continue the process, the Commission set up a high level panel composed of national, European, and international politicians, entrepreneurs, and specialists with deep knowledge in economics and the environment.[12]

The **Water Framework Directive** is the most important EU legal instrument for water-related issues, which requires all rivers, lakes, coastal and underground waters to be clean by 2015. Member States must review the condition of their waters and draft clean-up plans.

Another element of the European legislation is the **Maritime Strategy Framework Directive**, which outlines a coordinated approach to managing human activities that impact the maritime environment. The directive requires national measures to be adopted as of 2015 to ensure that waste thrown into the sea will not threaten the marine and coastal environment and that sea waters will be cleaned up by 2020.

[12] http://ec.europa.eu/environment/resource_efficiency/ re_platform/index_en.htm

The European Commission issues guidelines for the safeguarding of water resources in Europe until 2020, and later it should assist the Member States in achieving the objectives adopted with regard to the guidelines. These guidelines are tools that help to improve the management of water resources and to streamline water policy into all other political strategies.

As a result of the adoption of the EU environmental regulations, the overall quality of waters in the EU bathing areas has already considerably improved within the last twenty years. The Annual European report on the quality of waters in bathing areas presents the actual picture in more than 22,000 bathing sites, situated at the seaside and on rivers and lakes in the EU Member States and in selected countries neighbouring the EU. Its authors confirm that the quality of water in these locations in the EU has significantly improved since 1990. At that time 9.2% of seaside bathing areas and 11.9% of inland bathing areas did not meet the requirements specified in binding EU regulations, while in 2011 these shares decreased to 1.5% and 2.4% respectively.[13]

The natural environment faces many threats across the world, while **biodiversity** – a term which refers to the richness of the world of nature with all its species and genetic diversity – is globally declining. In order to meet these threats, the EU aims to stop the loss of biodiversity and ecosystems and to re-develop them by 2020. The European Union adopted an Action Plan for Biodiversity in 2006. Then at the beginning of 2011 – several months after the world adopted an ambitious global agenda in Nagoya (Japan) – the EU decided to implement a final and updated version of the strategy. Its primary objective is to prevent the loss of biodiversity and the degradation of ecosystems in the EU by 2020 and to the greatest extent possible to restore them.[14]

4. Present environmental activities of the European Union

The environmental standards binding in the EU are amongst the most stringent in the world. Environmental policy **helps develop an environmentally-friendly economy, protect nature and take care of the health and quality of life** of EU residents.

[13] http://www.eea.europa.eu/themes/water/ status-and-monitoring/state-of-bathing-water.

[14] http://www.eea.europa.eu/themes/water/ status-and-monitoring/state-of-bathing-water.

4.1. Environmental economic growth

Environmental protection and maintaining EU competitiveness in the global market can go hand in hand, and environmental policy can play a key role in the creation of jobs and in stimulating investment. Environmental economic growth calls for an integrated policy that supports **the principles of sustainable environmental growth**. Environmental innovations may be delivered and implemented to improve the competitiveness of Europe and the standard of living of Europeans. Integrity in action is of paramount importance in this context.

4.2. Protection of nature

Nature is a system, and **our whole life is based on it**, so we must take care of it. We share resources, such as water, air, natural habitats and the species that live in them and the same environmental standards protect them across the globe. Europe protects natural resources and is undertaking efforts to stop the extinction of endangered species and habitats. **Natura 2000** is a network of 26,000 natural protected areas that cover almost 20% of the land territory of the European Union. Sustainable activity of humans may co-exist there with rare and vulnerable species and habitats.

4.3. Protection of the health and well-being of EU residents

The contamination of water and air and the diffusion of chemicals are commonly perceived as among the major environmental problems. To protect its citizens against environmental threats which impact their health and well-being, EU policy aims to:

- ensure **clean drinking water and clean water in bathing areas**,
- improve the **quality of air** and reduce noise,
- reduce or eliminate the effects of the **use of harmful chemical substances**.

5. Global challenges

As the population of the world is constantly growing and increasingly more people live in cities and towns, global environmental challenges are becoming ever more urgent. Further actions are necessary to ensure that:

- the air, oceans, and other water resources are clean,
- soil and ecosystems are used in a sustainable way,
- climate change is limited to a reasonable level.

As a **global player** the EU plays a key role in the international efforts to promote sustainable growth at the global level.

Current EU policy until 2020 is based on the 7th Environmental Action Programme, for which the EU institutions are responsible, together with Member States' governments.[15]

6. European Union Strategy for Growth until 2020 – The Europe 2020 Strategy

The main goals of this Strategy are to ensure that the EU overcomes the crisis and to prepare European economies for the challenges of the next decade. Three fundamental growth factors, which will be implemented through concrete actions at the EU and national levels, include:

- intelligent growth (an increased role of knowledge, innovation, education, and the digital society),
- sustainable growth (production that more efficiently exploits natural and human resources with a simultaneous improvement of competitiveness),
- inclusive growth (increased professional activity, improved skills and combating poverty).

Since the 1970s the European Commission has formulated Action Programmes that provide the foundations for the European environmental policy. Officially they are not binding upon the Member States, being in the form of recommendations of development directions of this policy. The Sixth Community Action Programme "Environment 2010: Our Future, Our Choice" ran from July 2002 until July 2012.

At the end of 2012, the European Commission submitted the draft of the 7th European Union Environmental Action Programme: "*Living well within the limits of our planet"*. The social consultations and inter-institutional arrangements have been completed. The economic and Social Committee and the Committee of the Regions have already presented their opinions. **The programme was adopted by the European Parliament and by the European Union Council in November 2013.**

The proposed programme is based on the major accomplishments of 40 years of the EU environmental policy and some strategic documents in the field, including: *Resource Efficient Europe, EU Biodiversity Strategy until 2020,* and

[15] http://europa.eu/pol/env/index_pl.htm

the European Union Action Plan for Low Carbon Economy. The 7th Action Programme will ensure the involvement of the EU institutions, Member States, regional and local authorities, and other stakeholders in joint actions within the environmental policy until 2020. The programme identifies three priority areas, in which more action is required with respect to environmental protection and improved environmental resilience, more accelerated resource-efficient and low-carbon growth, and curbing threats to the health and well-being of humans caused by pollution, chemical substances and climate change.

The first area covers natural capital – from fertile soils and seas to fresh water and clean air – and the biodiversity that supports it.

The second area of action encompasses the conditions that will facilitate the transformation of the EU into a resource-saving, low emission economy.

The third key activity area covers the challenges connected with human health and well-being, such as air and water pollution, noise, and toxic chemicals.

The programme also identifies strategic plans for environmental policy, identifying nine priority goals to be achieved by 2020:

1. To protect, conserve and enhance the Union's natural capital;
2. To turn the Union into resource-efficient, green and competitive low-carbon economy;
3. To safeguard the Union's citizens from environment-related pressures and risks to human health and well-being;
4. To maximise the benefits of Union environmental legislation by improving implementation;
5. To improve knowledge and the empirical base of the Union's environment policy;
6. To secure investment for environment and climate policy and address environmental externalities (unfavourable climate change and realistic prices);
7. To improve environmental integration and policy coherence;
8. To enhance the sustainability of the Union's cities;
9. To increase the Union's effectiveness in addressing regional and global environmental challenges.[16]

The European Union's "20/20/20" goals in the areas of climate and energy, resulting from Europe 2020 Strategy:

- to increase energy efficiency by 20% by 2020;
- to increase the share of renewable energy sources to 20% of the total consumption of energy in the EU by 2020;

[16] http://eurofundsnews.eu/publikacje/siodmy-unijny-program-dzialan-w-zakresie-srodowiska-naturalnego-do-2020-r/

- to reduce, by 2020, greenhouse gas emissions by at least 20% compared to 1990, with the possibility to reduce them to even 30%, provided other developed countries commit themselves to comparable reductions of emissions and selected developing countries contribute in accordance with their reduction capacities.

"EU Energy Strategy 2020" also provides a solid and ambitious European framework for EU energy policy, identifies energy priorities for the upcoming decade, and specifies actions that need to be performed in the near future, including the **Free movement of energy**. Electricity and gas are transported in networks and pipelines which often go beyond state borders. Decisions made within the energy policy of one country inevitably impact other countries. Hence what is required includes:

- **Key technological changes**, without which the EU will not be able to deliver on its ambitions to decarbonise the electricity and transport sectors by 2050;
- **Strong international partnerships**, within which the EU may deliver on common goals when it comes to the security of energy supplies, competitiveness, and the sustainable growth of the energy sector. Although relationships with producers and transit countries are important, relationships with big energy recipients, in particular in emerging and developing economies, are particularly relevant.

7. Europe's share in global greenhouse gas emissions

The European Union is responsible for 11% of global greenhouse gas emissions. Over 80% of European emissions come from energy production and consumption in the transport sector. In 2011, the Commission published its action plan, which delineated the most economical path to achieving a competitive low carbon economy by 2050 and specified stages that allow for measuring the progress achieved. The action plan shows how various sectors, from electricity generation to agriculture, may contribute to the accomplishment of this goal. By the mid 21st century the energy production sector will have to become almost 100% carbon-free. In addition, increased energy efficiency will reduce energy consumption in the EU by 30% by 2050. The use of locally-generated energy may contribute to the reduction of dependence on imports, while shifting to a low carbon economy will reduce air pollution and the associated costs of health care.[17]

[17] United Nations Conference on Sustainable Development- Rio+20; http://sustainable development.un.org/ rio20

The role of Renewable Energy Technologies in the global economy is gaining in importance. Improved energy efficiency and the development of sustainable agriculture based on renewable energy sources in rural areas are key poles of sustainable growth in the global economy and in its regions. Agriculture is one of the EU sectors highly oriented towards the reduction of greenhouse gas emissions and use of renewable energy sources.

8. Sustainable transport

Noise and air pollution generated by transport pose serious problems across the EU and have severe implications for human health.

Within the framework of the EU climate and energy package, the EU is obliged to achieve a 10% share of renewable energy (including biofuels, electricity generated from renewable sources, and hydrogen) in the fuel demand of the transport sector by 2020. This goal is connected with the implementation of binding sustainable growth criteria with regard to biofuels in the Renewable Energy Directive and the Directive on the quality of fuels.[18]

8.1. Environmental transport package

The goal of this package is to make the transport sector more environmentally friendly, internalise the external costs, and limit noise from railways.

A motion was submitted to collect fees from trucks for the use of certain types of infrastructure. In April 2009 a regulation was adopted which laid down binding CO_2 emission limits for new passenger cars.

Provisions of the transport package

- To adopt a directive on the promotion of clean and energy-efficient road transport vehicles;
- To approve an action plan for the implementation of intelligent transport systems in Europe;
- To undertake new actions as a follow-up to the adoption of the Green Paper on Urban Mobility;

[18] See also: M. Loennroth, The Environment in the European Social Model, in: Global Europe, Social Europe, ed. by A. Giddens, P. Diamonds, R, Liddle, Polity Press, Cambridge, Malden, 2006, pp. 217–218.

- To come to an agreement on the inclusion of air transport in the Community emissions trading system starting in 2012;
- To adopt a package on a maritime safety and maritime transport development strategy until 2018;
- To adopt a new directive on the labelling of tyres, regulation on tyre noise limits, standards of tyres' rolling resistance and provisions concerning tyre pressure monitoring systems.

8.2. Sustainable use of natural resources strategy

This strategy is aimed at reducing the negative environmental impacts of the depletion of natural resources, which prevents the achievement of higher growth and employment rates in accordance with the goals of the Lisbon Strategy. Natural resources, especially those that contaminate the environment, should be replaced with alternative solutions and energy sources.

These actions should be complementary to the integrated product policy and the use of environmentally-friendly technologies.[19]

8.3. Prevention (preventing waste generation) and recycling strategies

Legislation and actions should be prevention-oriented in order to avoid the negative impact upon the environment of waste and to enable efficient recycling.[20]

[19] Communication from the Commission of 1 October 2003 – Towards a Thematic Strategy on the sustainable use of natural resources [COM(2003) 572 – not published in the Official Journal].The EU sets out the main principles for formulating a European strategy aimed at reducing the environmental impact of resource use, taking as its basis the state of these resources and building on existing policies, http://europa.eu/ legislation_summaries/environment/sustainable _development/l28167_en.htm

[20] For more, see: Commission Communication of 27 May 2003 "Towards a thematic strategy on the prevention and recycling of waste" [COM (2003)301- Official Journal C 76, 25 March 2004], http://europa.eu/legislation_summaries/ other/l28151_en.htm

8.4. Sustainable competition and tourism

Europe is the most attractive tourist destination in the world and the tourism sector plays an important role in the EU economy, which contributes to economic growth and the creation of new jobs. The attractiveness of Europe and development of tourism, especially in the Southern regions of the continent, are closely tied with its impact upon the environment and local communities. Thus it is important to develop and promote a holistic approach, connected not only with the economic development of tourism but also with environmental protection, social cohesion, and the promotion of culture in European tourist destinations.

Challenges facing tourism development in Europe:

- to ensure safety to tourists and local communities;
- to protect the environment and cultural resources in tourist destinations;
- to minimise the use of raw materials and to reduce pollution in tourist destinations;
- to take care of the interest and well-being of local communities;
- to reduce the seasonality of demand;
- to take care of the local environmental impact of tourism-related transport;
- to take care that tourism is available to all and ensure non-discrimination in this sector;
- to improve the quality of jobs in tourism.[21]

9. Conclusions and future directions of action – A contemporary model of continuous economic growth in Europe and the circular economy

The contemporary economic model based on continuous growth may lead to the exhaustion of resources available at acceptable prices and destroy the biological foundations of life to an extent that the mankind will fight over drinking water and food and will suffer from unpredictable, rapid climate changes. Many communities, enterprises, and local governments have launched actions designed to limit the consequences of such developments, which pose a threat to life and health on the Earth. The time has come to seek products and services which are, beginning in the design stage, intended for the longest possible life-cycle; to

[21] Communication from the Commission of 19 October 2007 – Agenda for a sustainable and competitive European tourism [COM(2007) 621 final – Not published in the Official Journal]; http://europa.eu/legislation_summaries/environment/sustainable_ development/l10132_en.htm

engage in transformations and the recycling of natural resources; and to exclude toxic materials and processes generating harmful emissions.

This entails striving to build a circular economy founded on: the consumption of resources reduced to the necessary minimum; the use of renewable resources in a way that ensures their regeneration; eco-design and clean production; consumption of renewable energy; instituting consumption patterns that respect the environment; using wastes as raw materials and processing them without negative external effects.[22] All this means deep systemic changes – not only technological, organisational and social innovation, but changes in financing and new policy instruments.[23]

The idea of a circular economy, which can also be called a 'closed-loop economy', i.e. one that produces minimum waste and in which and wastes, if they are generated, become raw materials. The amount of real waste is constantly shrinking. Wastes on our planet can be minimised by the implementation of responsible research to further the innovation principle, i.e., "reduce, reuse, and recycle". This means that each individual must reduce waste and, if he or she has have generated any, reuse it or recycle it.

The circular economy is thus an economy in which production and consumption are organised in such a way that the value of products, components, materials, and resources is maintained within the value chain and products' life-cycles. Resource efficiency is maximised, while the extraction of raw materials and production of wastes are minimised.

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[22] http://ec.europa.eu/environment/circular-economy/index_en.htm

[23] http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1415352499863&uri=CELEX: 52014 DC0398R% 2801%29

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Streszczenie

"NOWA" POLITYKA ŚRODOWISKOWA UNII EUROPEJSKIEJ: DROGA DO ROZWOJU GOSPODARKI CYRKULARNEJ I NIWELOWANIE NEGATYWNYCH SKUTKÓW ZMIAN KLIMATYCZNYCH

Celem artykułu jest poddanie analizie procesu ewolucji nowej polityki środowiskowej Unii Europejskiej w kontekście zamierzeń niwelowania negatywnych skutków zmian klimatycznych. W artykule zaprezentowane zostały aktywności podejmowane na poziomie UE ukierunkowane na wdrażanie nowych instrumentów tej polityki, w tym zwłaszcza dotyczących rozwoju technologii niskoemisyjnych, wdrażania instrumentów ukierunkowanych na zarządzanie ograniczonymi surowcami naturalnymi, na rozwój przyjaznego dla środowiska I bardziej efektywnego transportu i in. Wszystkie te działania mają na celu ukierunkowanie rozwoju gospodarki europejskiej na osiągnięcie końcowego efektu, jakim jest gospodarka cyrkularna, ukierunkowana na maksymalizację wydajności zasobów i na minimalizację wydobycia zasobów i powstawania odpadów.

***Słowa kluczowe**: nowa polityka środowiskowa UE, zmiany klimatyczne, gospodarka cyrkularna*