



NEW DEVELOPMENTS OF THE EU CIRCULAR ECONOMY POLICY AND THEIR IMPACT ON EU WASTE LAW

NOWE ROZWIĄZANIA W POLITYCE UNII EUROPEJSKIEJ
DOTYCZĄCEJ GOSPODARKI O OBIEGU ZAMKNIĘTYM
I ICH WPŁYW NA UNIJNE PRAWO O ODPADACH

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— ABSTRACT —

The concepts of ‘green economy’ and ‘sustainable consumption and production’ determine the direction of political and legal changes as the goals of the 2030 Agenda followed also by the European Union and its Member States. ‘Circular economy’ as an element of those concepts includes waste management and is a vital element of EU environmental policy. Turning waste into resources presents a multidimensional challenge. In the years 2015–2018, the European Commission conducted works on the changes in the community law on waste which will enable the enforcement of ‘circular economy’ goals. In May 2018, four directives which will significantly remodel the obligations of Member States in the scope of waste management were enacted. Also in 2018, the Commission announced new proposals, as well as law changes, emphasizing the problem of plastic waste.

— ABSTRAKT —

Koncepcje „zielonej gospodarki” oraz „zrównoważonej konsumpcji i produkcji” wyznaczają kierunek zmian politycznych i prawnych jako Cele Agendy 2030, realizowanej również przez Unię Europejską i jej państwa członkowskie. „Gospodarka o obiegu zamkniętym” – jako element tych koncepcji – obejmuje również gospodarkę odpadami i stanowi istotny element polityki ochrony środowiska UE. Przekształcenie odpadów w zasoby stanowi wielopłaszczyznowe wyzwanie. W okresie 2015–2018 Komisja Europejska przeprowadziła prace nad zmianami w unijnym prawie o odpadach, które umożliwiają wdrożenie celów „gospodarki o obiegu zamkniętym” w życie. W maju 2018 roku uchwalone zostały cztery dyrektywy znacząco przemodelowujące zobowiązania państw członkowskich w zakresie gospodarki odpadami. Również w 2018 roku Komisja ogłosiła nowe propozycje, w tym zmiany prawa, eksponując zwłaszcza problem odpadów plastikowych.

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Keywords: Sustainable Development Goals, circular economy, resource efficiency, EU waste law, EU environmental policy

Słowa kluczowe: Cele Zrównoważonego Rozwoju, gospodarka o obiegu zamkniętym, efektywność wykorzystania zasobów, prawo o odpadach UE, polityka ochrony środowiska UE

INTRODUCTION

The issues concerning ‘circular economy’ have interdisciplinary character. In the broadest perceptible scope they are the object of intensive economic sciences research (Frodermann, 2018; Bermejo, 2014). Among the definitions, a special attention should be paid to the combination of ‘circular economy’ and ‘linear economy’. From this point of view, “[...] a linear economy is one defined as converting natural resources into waste, via production. Such production of waste leads to the deterioration of the environment in two ways: by the removal of natural capital from the environment (through mining/unsustainable harvesting) and by the reduction of the value of natural capital caused by pollution from waste. Pollution can also occur at the resource acquisition stage” (Murray, Skene, & Haynes, 2017). R.C. Brears indicates coherently the directions of changes necessary to switch from ‘linear economy’ to ‘circular economy’. The list of desired actions proposed by him can be divided into two groups: 1) concerning products (light-weighting, durability, efficiency, substitution, eco-design, maintenance and repair services, consumer options), 2) concerning waste (facilitating the clustering of activities to prevent by-products from becoming wastes, creating markets for secondary raw materials, waste reduction, waste separation; Brears, 2018).

The transition into ‘circular economy’ is also a goal of international cooperation within sustainable development and environmental protection. This cooperation is developing intensively and beside political dimension gains noticeable legal dimension. This process can be especially seen in the case of a particular international organization, i.e., the European Union. The aim of this work is to introduce the roots and paths of the formation of the ‘circular economy’ concept in the international context of the United Nations (UN) and then to introduce the course of the penetration of its guidelines first into the EU environmental policy and then into its legal system. Waste management is currently the area within which this process is the most consistently realized at the EU level and consequently in the legal systems of Member States. In 2018, a significant turn

took place in the EU ‘circular economy’ policy in the form of the amendment of the main EU directives of waste law, which issue a serious political, legal and social challenge to Member States and their legislative bodies. At the same time, further proposals emerged, making the actions towards ‘circular economy’ increasingly dynamic. However, the question is whether the EU Member States will be able to fulfil such rapidly growing obligations.

INTERNATIONAL BACKGROUND: ‘GREEN ECONOMY’
AND ‘SUSTAINABLE CONSUMPTION AND PRODUCTION’
AS SUSTAINABLE DEVELOPMENT GOALS

The environment (the whole of natural elements) is presented as a resource (resources) showing varying degree of renewability. Resources are only one of distinguished economic functions of the environment beside such functions as: amenity values, a sink for residual flows and a life-support system (Maitre-Ekern, 2017; Andersen, 2007). The access to the environment and the opportunity of using it as a necessary condition for economic development is not even in the global range and is not unlimited (Meadows, Meadows, Randers, & Behrens, 1972). The fundamental proposal formulated towards the challenge which is the impact of natural resources limits on a human life is the concept of sustainable development (WCED, 1987). In the legal aspect it is expressed as the sustainable development principle (Bukowski, 2009). In the Brundtland Report it was indicated, among others, that: “Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits – not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. [...] Sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs” (WCED, 1987).

The exploitation of natural resources, the scale and the character of industrial production, consumption patterns and waste production and management in the process of change, i.e., sustainable development process, are mutually connected.

In the Brundtland Report the main postulate was summarized in the following slogan: “Producing More with Less”. As an element of achieving sustainable development, this thread – under the name ‘sustainable consumption and production’ (SCP) – was a steady object of further analyses, assessments and proposals within international cooperation, having its summary during several United Nations conferences (the UN Conference on Environment and Development in Rio de Janeiro in 1992, the World Summit on Sustainable Development in Johannesburg in 2002, the UN Conference on Sustainable Development – Rio+20 – in Rio de Janeiro in 2012), as well as within deep and specialized forms of international cooperation, as – e.g. – the Marrakech Process. It was initiated in 2003, in response to the outcome of obligations assumed at WSSD in Johannesburg, as informal and global process of cooperation in the scope of the implementation of SCP, coordinated by the UN Environment Programme and the UN Department of Economic and Social Affairs (UNEP, 2011).

The notion SCP should be understood as “the production and use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations” (UNEP, 2008). This definition, proposed in 1994 at the Symposium on Sustainable Consumption (‘Oslo Symposium’), is commonly cited in works carried out by various international organizations (especially the UN and the OECD). It is also indicated that “SCP is about increasing resource efficiency and promoting sustainable lifestyles, which requires cooperation among different stakeholders and sectors. It has the potential to make an important contribution towards poverty alleviation and the transition towards low-carbon and green economies” (Heyenga, 2011). The key principles of SCP are: 1) improving the quality of life without increasing environmental degradation and without compromising the resource needs of future generations; 2) decoupling economic growth from environmental degradation by: i) reducing material/energy intensity of current economic activities and reducing emissions and waste from extraction, production, consumption and disposal; ii) promoting a shift of consumption patterns towards groups of goods and services with lower energy and material intensity without compromising quality of life; 3) applying life-cycle thinking which considers the impacts from all life-cycle stages of the production and consumption process; 4) guarding against the re-bounce effect, where efficiency gains are cancelled out by resulting increases in consumption (UNEP, 2015).

The issues of SCP are evidently connected with such concepts as ‘green growth’ and ‘green economy’, originally created separately but essentially both constituting the aspiration to implement “a more integrated and holistic approach to incorporating environment and development in economic decision making, policy and planning” (Allen & Clouth, 2012). ‘Green growth’ is defined as “a development model that sustains strong economic growth, while ensuring climatic and environmental sustainability, poverty reduction, and social inclusion” (Global Green Growth Institute, 2016). Next it is pointed out that ‘green economy’ as a path of achieving sustainable development is an economy “which is efficient in its use of energy, water and other material inputs (resource-use efficiency), protects the natural environment, its ecosystems’ structures and flows of ecosystem services (ecosystem resilience), promotes human well-being and fair burden sharing across societies (social equity)” (EEA, 2014).

The issues of ‘green economy’ were one of the main problems proposed for inclusion in the agenda of UNSCD Rio+20, thus becoming the object of intensified research. One of their manifestations were the proposals of the catalogue ‘principles of the green economy’, among which the postulate of achieving SCP was visibly evident (Allen, 2012). In the final resolution of UNSCD in 2012 – *The Future We Want* – in paragraphs 60–61 it was indicated in this scope that: “green economy in the context of sustainable development and poverty eradication will enhance our ability to manage natural resources sustainably and with lower negative environmental impacts, increase resource efficiency and reduce waste” (UN, 2012). At the same time, in paragraph 226 the act: *The 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (2012–2022)* (UN, 2012a), being the outcome of the Marrakech Process, was indicated. The act proposed a non-exhaustive list of the following work areas serving the implementation of SCP: (a) consumer information; (b) sustainable lifestyles and education; (c) sustainable public procurement; (d) sustainable buildings and construction; (e) sustainable tourism, including ecotourism.

In September 2015 in New York, in the act *Transforming Our World: The 2030 Agenda for Sustainable Development* (UN, 2015), 17 Sustainable Development Goals (SDGs) with 169 associated targets were established, which became effective on 1 January 2016. In the scope of ‘green economy’ and SCP issues the most important are SDG 8 (“Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”) and SDG 12 (“Ensure sustainable consumption and production patterns”).

Ordering the mentioned concepts and notions, the layout proposed by the European Environment Agency should be adapted. While characterizing 'green economy' it is pointed out that it embraces three elements: 'circular economy', ecosystem resilience and human well-being. Whereas, within 'circular economy' three areas are distinguished: waste management, waste prevention and resource efficiency (EEA, 2016).

'CIRCULAR ECONOMY' AS AN ELEMENT OF THE EU ENVIRONMENTAL POLICY

The European Union is an active participant of the sustainable development implementation process, which is confirmed by Article 11 of the Treaty on the Functioning of the European Union (TFEU), according to which "environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development". According to Article 191(1) TFEU, Union policy on the environment shall contribute to pursuit such an objectives as "promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change". That is why the EU was an active subject cooperating with the UN in the discussion on 17 SDGs and currently working towards those goals. On account of it, in the communication *Next Steps for a Sustainable European Future – European Action for Sustainability* (EC, 2016) issued in 2016, it was indicated that "the 2030 Agenda provides an opportunity for the EU to strongly anchor its strategic orientation in the global effort to build a sustainable future, which the Union has co-shaped together with its partners. [...] This mapping exercise shows that current EU policies address all 17 goals".

The transition into 'circular economy' in the context of SCP, resource efficiency and waste as an important element of the EU environmental policy (including the part concerning waste) was perceived much earlier. In 2005 it was indicated, e.g., that "EU waste policy has the potential to contribute to reducing the overall negative environmental impact of resource use. Preventing waste generation and promoting recycling and recovery of waste will increase the resource efficiency of the European economy and reduce the negative environmental impact of use of natural resources. This will contribute to maintaining the resource base, essential for sustained economic growth" (EC, 2005). Whereas in 2008, in communication

on SCP/SIP Action Plan (EC, 2008) referring to the Marrakech Process works, the course of actions was identified, which was to serve achieving the main goal, i.e., “smarter consumption and better products”.

The specialized act which is still the main point of reference for the EU environmental policy is adopted in 2011 – the *Roadmap to a Resource Efficient Europe* (EC, 2011). In the context of one of the main assumptions, which is turning waste into a resource, it was declared that by 2020 waste is managed as a resource and that waste generated per capita is in absolute decline. From the legal point of view, *Roadmap* as a communication has the status of the act of soft law, however, it significantly impacts on basic acts which are currently legal basis defining the EU environmental policy in the scope analysed in this work, i.e., the 7th Environment Action Programme (OJ, 2013) and connected with it the LIFE Programme 2014–2020 (OJ, 2013a). Both acts – decision and regulation – directly refer to the elements of *Roadmap*, giving them full legal effect.

The realization of settled assumptions and goals of the change towards ‘circular economy’ is monitored at the level of the EU. The main indicator accepted in this scope – ‘resource productivity’, defined as “the ratio of gross domestic product (GDP) to domestic material consumption (DMC) expressed as EUR per tonne” – increased by 34% between 2000 and 2014, which gives rise to claim that in the EU “absolute decoupling of economic growth from resource use has taken place”. At the same time, it should be accepted that DMC measures the total amount, in tonnes, of material directly used in an economy, either by businesses, government and other institutions for economic production or by households (EU, 2017). However, the assessment of the causes of achieving this result is ambivalent. They cannot be directly attributed only to the effective environmental policy of the EU and its Member States omitting economic and technical factors (EEA, 2016a). The assessment of the realization of SDGs in the EU narrowing it only to waste allows to see some progress. It was noted that more than half of the waste that undergoes waste treatment in the EU is recycled – between 2010 and 2014 the share of recycling rose from 53% to 55%. At the same time, the share of landfilling – referring to the deposit of waste onto or into land – fell from 28% in 2010 to 25% in 2014. Whereas, in the case of a chosen category, which is municipal waste, the state of it is indeed positive, but the changes are slower (EU, 2017).

EU WASTE LAW AND 'CIRCULAR ECONOMY':
REVISION OF EU WASTE LAW DIRECTIVES

The active involvement of the EU into the realization of the 2030 Agenda for Sustainable Development and its 17 SDGs, reflected in the EU soft and hard law acts, explicitly confirmed the change in perceiving waste as a resource which no longer should be wasted. Thus the component which is waste prevention and waste management permanently and inextricably became the part of initiatives undertaken to carry out 'green economy' and SCP, especially by transition from 'linear economy' to 'circular economy'. Unavoidably, the proposals formulated in this aspect are more and more coordinated with the EU waste policy and legislation and then enacted in national law of the Member States. Moreover, although 'circular economy' includes not only waste it can be still observed that this is the area in which the solutions oriented to achieve the change in transforming waste into resources are adopted in the broadest scope. The research on national policy approaches to close material loops conducted in the EU confirm this state as 70% measures adopted so far by the Member States concern waste (53% – waste management, including recycling, 17% – waste prevention), which means that so far only 30% measures concern the phase of the product in the regular turnover (11% – production and distribution, 7% – consumption and stock, 6% – design, 3% – extraction of natural resources, 3% – re-use, repair, redistribute, refurbish, remanufacture; EEA, 2018). This course of action in the period after Rio+20 finds its reinforcements in several initiatives undertaken by the European Commission (EC) as well as finally by the EU legislator. Especially interesting here is the part which emphasizes the relation between 'circular economy' and the order to treat waste as a resource. The most important acts introduced in this scope are the communications: *Towards a Circular Economy: A Zero Waste Programme for Europe* (EC, 2014); *Closing the Loop – An EU Action Plan for the Circular Economy* (EC, 2015), and *The Role of Waste-to-Energy in the Circular Economy* (EC, 2017).

At the same time, in the communication *Closing the Loop* adopted in 2015, the EC proposed drafts of directives amending previously binding EU acts of waste law with the aim to adapt them to challenges resulting from the realization of 'circular economy' in the EU. Consequently, four directives were enacted on 30 May 2018 and they became legally binding on 4 July 2018. These are: directive 2018/851 amending directive 2008/98/EC on waste (OJ, 2018); directive 2018/850 amending directive 1999/31/EC on the landfill of waste (OJ, 2018a);

directive 2018/852 amending directive 94/62/EC on packaging and packaging waste (OJ, 2018b); directive 2018/849 amending directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment (OJ, 2018c). Member States are obliged to bring into force the laws, regulations and administrative provisions necessary to comply with those revisions by 5 July 2020.

A completely changed Article 9(1) of the directive 2008/98/EC on waste (Waste Framework Directive) may serve as the main point of reference to depict how the goals of the EU policy on ‘circular economy’ (as well as on the UN SDGs) are for the first time so unambiguously emphasized in the main EU act on waste law, which is that directive. As an example it can be pointed out that according to this article, Member States shall take measures to prevent waste generation and those measures shall, *inter alia*: promote and support sustainable production and consumption models; encourage the design, manufacturing and use of products that are resource-efficient, durable (including in terms of life span and absence of planned obsolescence), repairable, re-usable and upgradable and reduce the generation of waste, in particular waste that is not suitable for preparing for re-use or recycling.

Parallel to new goals of ‘waste prevention’, considered to be the most efficient way to improve resource efficiency and to reduce the environmental impact of waste, four new directives introduced solutions concerning ‘waste management’, which can be grouped as follows. Firstly, these are new targets to increase the levels of waste prepared for re-use and the recycling, separate collection of certain waste and to decrease the levels of stored waste which can be the source of resources. Secondly, to show the direction of changes implemented so far by Member States through incentives rather than legal bans (as for example within food waste) together with the new annex IVa of WFD *Examples of Economic Instruments and Other Measures to Provide Incentives for the Application of the Waste Hierarchy Referred to in Article 4(3)*. Thirdly, new regulations specifying premises and conditions of implementation in Member States of the obligations within “extended producer responsibility” (EPR) were added. And finally, pursuant to the announcements of the EC presented in several communications, common and unified rules on the calculation of the attainment of the targets with so called “early warning reports”, as well as revised obligations of Member States concerning national reports or waste management were introduced.

In Article 11(2) WFD, the introductory part was replaced and now it states that “in order to comply with the objectives of this Directive, and move to a European circular economy with a high level of resource efficiency, Member States shall take the necessary measures” designed to achieve additional three new targets – 11(2)(c-e) WFD: by 2025, the preparing for re-use and the recycling of municipal waste shall be increased to a minimum of 55% by weight; by 2030, the preparing for re-use and the recycling of municipal waste shall be increased to a minimum of 60% by weight; by 2035, the preparing for re-use and the recycling of municipal waste shall be increased to a minimum of 65% by weight.

Moreover, goals for separate collection of new waste fractions were set. In Article 11(1) WFD, a new obligation was added saying that Member States shall set up separate collection for textiles by 1 January 2025. Similarly, according to new Article 20(1) WFD, by 1 January 2025 Member States shall set up separate collection for hazardous waste fractions produced by households to ensure that they are treated in accordance with Articles 4 and 13 and do not contaminate other municipal waste streams. Whereas, according to new Article 22(1) WFD, Member States shall ensure that, by 31 December 2023, bio-waste is either separated and recycled at source, or is collected separately and is not mixed with other types of waste.

New Article 5(3a) of Landfill Directive (OJ, 1999) states that Member States shall endeavour to ensure that as of 2030, all waste suitable for recycling or other recovery, in particular in municipal waste, shall not be accepted in a landfill with the exception of waste for which landfilling delivers the best environmental outcome in accordance with Article 4 of WFD. And according to new Article 5(5) of this directive, Member States shall take the necessary measures to ensure that by 2035 the amount of municipal waste landfilled is reduced to 10% or less of the total amount of municipal waste generated (by weight).

In Article 6(1) of Packaging Directive (OJ, 1994) new points were added, introducing minimum targets for recycling of all packaging waste and for specific materials contained in it (see: Table 1).

The last goal which can be indicated is the obligation included in Article 7(2) of Packaging Directive that Member States shall ensure that, by 31 December of 2024, EPR schemes are established for all packaging in accordance with Articles 8 and 8^a of WFD.

Table 1. New recycling targets for packaging waste

Legal basis: Packaging Directive	Item	Year/target (% by weight)	Year/target (% by weight)
		by 2025	by 2030
Art. 6(1)(f) and Art. 6(1)(h)	All packaging	65%	70%
Art. 6(1)(g)(i-vi) and Art. 6(1)(i)(i-vi)	Plastic	50%	55%
	Wood	25%	30%
	Ferrous metals	70%	80%
	Aluminium	50%	60%
	Glass	70%	75%
	Paper and cardboard	75%	85%

Source: Revised Art. 6 of Packaging Directive (OJ, 1994).

EU WASTE LAW AND ‘CIRCULAR ECONOMY’: EU CIRCULAR ECONOMY PACKAGE 2018

In January 2018, a new stage preparing Member States to transition into ‘circular economy’, i.e., Package 2018 began. It consists of EU soft law acts and reports: *A European Strategy for Plastics in a Circular Economy* (EC, 2018); *Communication on Options to Address the Interface Between Chemical, Product and Waste Legislation* (EC, 2018a); *Communication on a Monitoring Framework for the Circular Economy* (EC, 2018b); *Report on Critical Raw Materials and the Circular Economy* (EC, 2018c), Proposal for a Directive on Port Reception Facilities (EC, 2018d); Report on the Impact of the Use of Oxo-Degradable Plastic, Including Oxo-Degradable Plastic Carrier Bags, on the Environment (EC, 2018e).

It can be noted that the matter especially emphasized in Package 2018 is the problem of using plastic for production and consumption (*inter alia*: plastic overpackaging, single-use plastic products, standards for biodegradable plastics, risk assessment of the use of “oxo-degradable plastics” with additives designed to promote the oxidation of the material to the point where it brittles and fragments, as well as of “micro-plastics” with particles of a size below 5 mm, intentionally added in products such as cosmetics and detergents, or generated during use of products such as tyres and textiles or along the plastics production and supply

chain). As the second key challenge plastic waste management was indicated in connection with littering and leakage of plastic waste to environment, especially to marine environment. Plastic waste management is mainly connected with packaging waste. As the European Strategy shows, in 2017 the percentage share of individual economy sectors in generating plastic waste in the EU was as follows: 59% – packaging, 8% – electrical and electronic equipment, 5% – automotive, 5% – agriculture, 5% – construction and demolition, 4% – non packaging household, 14% – others (EC, 2018). As part of the goals of ‘Europe’s new plastic economy’, it was accepted among others that by 2030: all plastic packaging placed on the EU market is either re-usable or can be recycled in a cost-effective manner; more than half of plastic waste generated in Europe is recycled; and EU plastic sorting and recycling capacity has increased fourfold since 2015.

In May 2018, one more important component of this policy broadening the proposals concerning littering and leakage of plastic waste to marine environment, which is of a transboundary nature and is recognized as a global problem, was added. It was *Proposal for a Directive on the Reduction of the Impact of Certain Plastic Products on the Environment* (EC, 2018f). In the proposal the focus was laid on two main product (waste) categories: single-use plastics and fishing gear, pointing out among others that “in the EU, 80 to 85% of marine litter, measured as beach litter counts, is plastic, with single-use plastic items representing 50% and fishing-related items representing 27%”. Among the proposed instruments are: ban from the market for certain plastic products (cotton bud sticks, cutlery, plates, straws, beverage stirrers, sticks to be attached to and to support balloons), Member States’ obligation to reduce the use of plastic food containers and drinks cups and obligation to collect 90% of single-use plastic drinks bottles by 2025, obligatory EPR for producers of certain plastic products (food containers, packets and wrappers made from flexible material containing food that is intended for immediate consumption from the packet or wrapper without any further preparation, beverage containers, cups for beverages, tobacco products with filters and filters marketed for use in combination with tobacco products, wet wipes, balloons and lightweight plastic carrier bags) and fishing gear containing plastic placed on the Union market, new labelling requirements for sanitary towels, wet wipes and balloons; new product requirements for beverage containers; awareness-raising measures directed at consumers.

CONCLUSIONS

The EU's active involvement at the international level into initiatives implementing the concept of 'green economy' along with SCP and consequently the goals of 'circular economy' takes place not only at the political but also legal level. The furthest progress in this process in the years 2015–2018 can be seen with reference to the EU waste policy and law, with the biggest involvement into waste management. Four directives enacted in May 2018 explicitly give the SGDs goals within the EU legal dimension, imposing on Member States significantly increased requirements in this scope in comparison with the current state. While the changes focus mainly on waste prevention and waste management, the new proposals of the EC, especially those concerning plastic products, will unambiguously impact the EU product policy with the aim of eliminating selected types of products from the common market.

New legal solutions already accepted (and in the future also the planned ones) pose a significant challenge for Member States, because they naturally result in some limitations of freedom to conduct business, as well as they impose new obligations to consumers. At the same time, the changes assume active role of public administration in reorganizing existing systems of waste management, including different levels – from the incentives for innovation and for the participants of the recyclable materials' market to the introduction of deposit-refund schemes. This task has also financial dimension (public support oriented towards SCP projects, new infrastructure investments) and executive – monitoring and supervision of law-compliance by entrepreneurs and consumers.

It was observed that within the EU as a whole both the 'resource productivity' indicator and the levels of proper recycling of waste had risen. However, there are significant differences in the scope and the dynamic of tasks' realization between individual Member States. For instance, in the municipal waste category it is indicated that the overall rate of recycling (material recycling, composting and digestion) for the EU increased from 31% in 2004 to 45% in 2015. Poland is among the states which between 2004 and 2015 achieved the highest increase in recycling rates – Polish rate increased from 5% in 2004 to 43% in 2015. Generally in 2015, the overall rate of recycling was the highest in Germany – 66%, the lowest respectively: in Malta – 7% in 2015, in Romania – 13%, and in Greece – 15% (EEA, 2017). Such noticeable differences between Member States pose a substantial risk to the effective realization of the EU 'circular economy' policy.

The level of municipal waste management as a hard to organize sector of waste management is representative of the real effectiveness of legal system of a given Member State implemented in this scope. Taking into consideration this criterion, it should be noticed that even in the case of Poland and its significant progress in municipal waste management the chances to achieve solutions towards ‘circular economy’ at the pace required by the EU waste policy and law should be assessed very cautiously. For instance, *The Roadmap for the Transformation Towards Circular Economy* for Poland is still at the stage of a draft (RM RP, 2018), so it is hard to say when it becomes binding. Whereas, in the context of realizing tasks within municipal waste management by gminas, which will allow to achieve the goal established for 2020 “preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass – 50% by weight” – the assessment carried out on the grounds of audit by the Polish Supreme Audit Office (NIK) is rather pessimistic. It indicated that in 14 out of 22 gminas where the audit was conducted, the levels achieved in 2016 were lower than in 2015, which can mean that there is high probability that Poland will not achieve the goal required by the EU by 2020. On account of this situation, NIK explicitly recognizes the necessity to intensify legal and administrative actions both at the local and central level (NIK, 2018). This example of current hardships in realizing obligations within the EU law on waste management by a Member State depicts how significant the legal-organization and financial effort of a Member State will have to be to fulfil new challenges within the EU Circular Economy’s policy.

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