

**Dr Ewelina Badura**

Uniwersytet Ekonomiczny w Krakowie

ORCID: 0000-0002-5514-6299

e-mail: badurae@uek.krakow.pl

# EU — a new Green Economy leader? Circular economy in European legislation

UE — nowym liderem Zielonej Gospodarki?  
Gospodarka o obiegu zamkniętym w regulacjach prawa unijnego

## Abstract

Municipal waste management for many years has remained in the center of attention of the European Commission. The purpose of this paper is to present the concept of circular economy in European legislation, which defines key issues for detailed policies and action plans as well as provides guidelines for the Member States showing, at the same time, the way for economy transformation. Over the last five years, the European Commission has issued several significant documents discussing many commendable policies. The main objective of these policies is to prevent the creation of waste by solving the issue of waste "at source" and enabling the maximum possible recycling of raw materials and energy. At the same time, these policies pose a tough challenge for many EU Member States in terms of implementing new environmental protection laws. The analysis of legislation in this field will bring an answer to the question whether the European Union may soon become a "Green Economy" leader.

**Keywords:** environment, order, economy, regulation, waste

**JEL:** K2

## Introductory remarks

Currently, the process of transformation towards the circular economy (CE) is a priority in the economic policy of the European Union (EU) (Uberman, 2019, p. 129–140). This paper concentrates on the European legislation, and only sparsely refers to specific examples of national legislations. Moreover, due to their nature, the new regulations still have not been implemented to the most of national laws and the changes in this respect have not even been planned.

## Streszczenie

Gospodarka odpadami komunalnymi jest od wielu lat obszarem szczególnego zainteresowania Komisji Europejskiej. Celem niniejszego artykułu jest przedstawienie koncepcji gospodarki o obiegu zamkniętym (*circular economy*) w regulacjach prawa unijnego, które określają ramy problemowe dla polityk szczegółowych i programów działania oraz stanowią wytyczne dla krajów członkowskich, pokazując jednocześnie drogę transformacji gospodarki. W ostatnich pięciu latach Komisja Europejska wydała kilka bardzo istotnych dokumentów, podejmujących wiele zasługujących na aprobatę polityk. Celem tych polityk jest przede wszystkim zapobieganie powstawaniu odpadów przy rozwiązywaniu problemu odpadów „u źródła” oraz maksymalne możliwe odzyskiwanie zawartych w nich surowców i energii. Jednocześnie polityki te stanowią niełatwe wyzwanie dla wielu państw członkowskich UE w zakresie wdrożenia nowych regulacji w obszarze ochrony środowiska. Analiza regulacji w tym obszarze umożliwi odpowiedź na pytanie, czy Unia Europejska stanie się wkrótce liderem Zielonej Gospodarki.

**Słowa kluczowe:** środowisko, ład, gospodarka, regulacje, odpady

The idea of circular economy is the fundamental issue which, in its formalised shape (Stahel, 2016, p. 531, 435–438), appeared at the EU level in 2015 and it emerged as a transformation of the concept that initially had been strongly promoted as the "zero waste"<sup>1</sup> idea, i.e. the concept of wasteless economy. The latter may be considered rather a futuristic vision as currently it is not possible to eliminate the production of waste from manufacturing processes (Górski, Kierzkowska, 2018, p. 414–418). Therefore, the concentration on the reduction of waste generation and, in particular, on its better recovery was considered a much

better idea. This is where the concept of circularity, the basis of the circular economy, emerged. This paper presents an overview of the most important environmental protection policies implemented at the EU level. The aim of the analysis is to answer the question posed in the title, related to the possibility of the EU obtaining the status of the green economy leader<sup>2</sup> (Wyszkowska, Rogalewska, 2016, p. 54–74).

## EU Action Plan for the Circular Economy

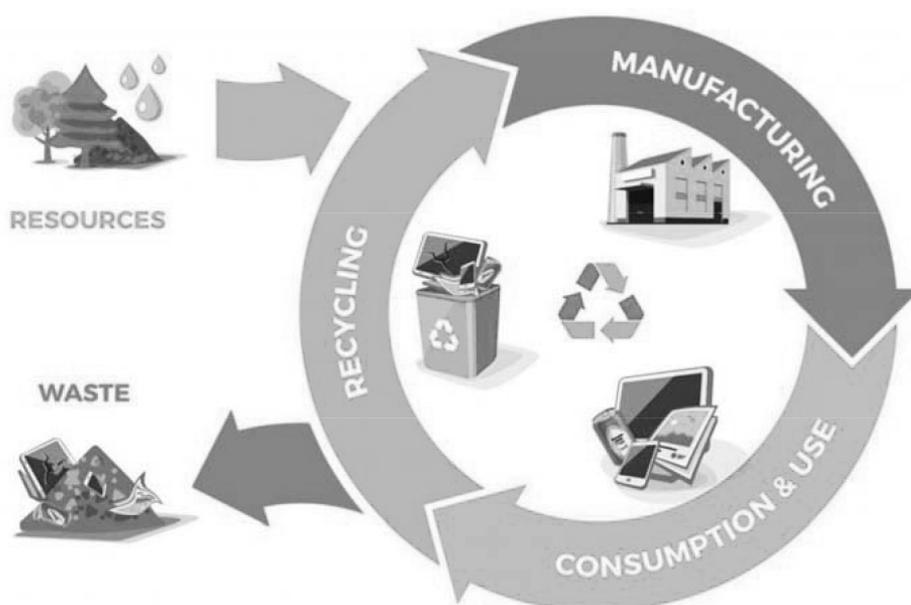
The Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 2 December 2015 COM(2015) 614 final<sup>3</sup> proposed a certain strategy of action towards the circular economy. Acting through communications is characteristic of the way the EU operates also in other areas, not only in the field of environmental protection laws. It is a certain concept, which is drawn up in a more formal manner in a document taking the form of strategy implementing an action plan. From the legal point of view, a communication does not constitute a normative act. Therefore, it does not impose any specific obligations on the Member States in particular. As a matter of fact, a communication precedes the adoption of normative acts and points at obligations to be implemented. An important part of such a plan or a strategy of action is the presentation of a list of legislative tasks directed to EU authorities, consisting in drawing up legal regulations that implement certain objectives set before a given strategy (Woltjer, 2018, p. 4–29). This was

also the case with the aforementioned Communication from the Commission.

The concept of circular economy<sup>4</sup> is based on a premise that the value of products, materials and resources in the economy should be maintained as long as possible and waste generation should be maximally reduced. The circular economy therefore amounts to an economy which is sustainable (Hamilton, Ruta, 2006, p. 23), low-carbon, resource-efficient and competitive (Malinauskaite, Jouhara, Czajczyńska *et al.*, 2017, p. 2013–2044). However, the broadly understood idea of circular economy deserves an attention, especially in the context of the evolutionary approach to the very stringent and preventive objective, i.e. that waste generation will not be admissible at all. One should, however, assume that for the time being waste generation cannot be fully eliminated. This is why waste should be treated as something that may still bring benefit in the future, and not only nuisance that needs to be got rid of. In this approach, circular economy means that the value of products, materials and resources in the economy should be maintained as long as possible and waste generation should be reduced to the minimum (Tomić, Schneider, 2018, p. 268–287). In this view, it is worth taking steps that are primarily aimed at restoring to circulation the products and substances contained in waste in order to protect the environment and natural resources. Therefore, circular economy is an economy which is sustainable and, at the same time, low-carbon, resource-efficient and competitive.

Figure 1, based on the 'COM(2015) 614 final' Communication that has been widely recognised graphically presents the concept of circular economy where resources entering the circulation in every stage of their processing, entering to circulation and also utilisation must

Figure 1  
The concept of circular economy



Source: <https://ec.europa.eu/>.

be treated as a certain environmental resource which, after its utilisation is concluded, should return to circulation through recycling, this way reducing the amount of resources brought in from the outside.

Only the so-called residual waste may leave this circulation and attempts should be made to systematically decrease its amount. The importance of the diagram only lies in the fact that it demonstrates that this objective cannot be met at a single stage of collecting and recycling the waste already generated, but it is an activity that must be carried out in a much broader scope, including the stage of designing products. This objective is very difficult in practical implementation as it obviously entails interference with the economic activity. It no longer concerns only entities responsible for waste management, but it encompasses activities ensuring the safety in such activity as well as the activity consisting in designing, manufacturing or distributing products.

The 'COM(2015) 614 final' Communication comprises a number of guidelines in this respect and indicates with no doubt that the aforementioned transition enables economic transformation and gives Europe the new and prolonged competitive advantage. At the EU level these legislative commitments have been, in fact, fulfilled. Their transposition into the domestic law is, however, a different matter.

### Legislative actions

A number of conclusions have been drawn from the assumed objective, which show that the areas of necessary actions should be defined very broadly. They should include production, consumption, waste management on the secondary raw materials market, and, last but not least, the introduction of innovation. Also, different types of potential raw materials that can be found in wastes should be taken into account. As it appears to be difficult to set certain joint general criteria, these different areas need to be approached differently. The necessity to monitor these processes on an ongoing basis (Kulczycka, Bączyk, Nowaczek, 2020, p. 9–20) and readjust the activities undertaken is obviously of vital importance.

As part of the conclusions drawn in 2015, a number of formal legislative actions were indicated and proposals of amendments to the directives in force at that time were put forward. In particular, they referred to the Waste Framework Directive (2008/98)<sup>5</sup> and to the so-called Packaging Directive (94/62)<sup>6</sup>, the Landfill Directive (1999/31)<sup>7</sup>, the End-of-life vehicles Directive (2000/53)<sup>8</sup>, Directive on batteries and accumulators and waste batteries and accumulators (2006/66)<sup>9</sup>, Directive on waste electrical and electronic equipment (2012/19)<sup>10</sup>. The amendments would then cover the most typical kinds of waste as well as the existing ways of managing it, i.e. they would also refer to the Landfill Directive and general principles of conduct in matters regulated by the Framework Directive.

Considering the above, a number of very specific issues were indicated, which would require reviewing, clarifying, regulating, supplementing, explaining and unifying of some definitions. The Communication also pointed at the necessity to extend the scope of goals to be met in the field of recycling of resources from waste, that is at the so-called levels of recovery and recycling for a specific category of waste. Focus of attention was drawn to municipal waste and such other types as packaging waste or to the matter of limiting landfill in the perspective of 2030, for which the reduction by 10% was assumed.

### Implementation of objectives

Directive (EU) 2018/851<sup>11</sup> of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste was published on 14 June 2018 in Official Journal of the European Union. The amendments that were published concerned several legislative acts in the field of environmental protection. Regulations to be amended refer to the following Directives:

- on waste,
- on the landfill of waste<sup>12</sup>,
- on packaging waste<sup>13</sup>,
- on the end-of-life vehicles<sup>14</sup>,
- on waste electrical and electronic equipment<sup>15</sup>,
- on batteries and accumulators and waste batteries and accumulators<sup>16</sup>.

One of the most important changes introduced by the EP and Council Directive (EU) 2018/851 is the definition of bio-waste (Maśliński, Mądry, 2019, p. 30–32). Under the amended Directive, bio-waste may also originate from offices and wholesalers. The Directive also introduces the definitions of non-hazardous municipal waste, construction waste and demolition waste. Regulations concerning the manufacturer's extended liability have been expanded and supplemented, and the procedure for recognising an object or substance as a by-product has been added. Moreover, according to the amended Directive, the European Commission or individual EU member states may introduce criteria for adopting conditions to consider an item or substance a by-product. Additionally, it provides for the possibility to establish criteria regarding the procedure of losing the waste status.

In accordance with the amended Directive on waste, from 1 January 2025 such municipal waste as textile waste and hazardous waste will also be covered by the obligation of selective collection. New regulations impose obligatory segregation, which from 1 January 2023 will also include bio-waste. The amended Directive on waste also assumes better preparation for the re-use and recycling of municipal waste to 55% in 2025, 60% to 2030 and 65% to 2035. The Directive (EU) 2018/850 of the EP and of the Council of 30 May 2018, amending Directive 1999/31/EC on the landfill of waste introduced, among other things: an obligation to reduce landfilling of municipal waste by 2035 to the

maximum of 10% of the total amount of municipal waste generated.

Most important changes implemented in the Directive (EU) 2018/852 of the EP and of the Council of 30 May 2018, amending Directive 94/62/EC on packaging and packaging waste include the increased level of recycling of packaging waste to 65% by 31 December 2025 and 70% by 31 December 2030 respectively. The target recycling levels have also been raised for packaging materials, which by 31 December 2025 should amount to: 75% for paper and cardboard, 70% for glass, 70% for ferrous metals (Jackson, Lederwasch, Giurco, 2014, p. 516–543), 50% for plastics, 50% for aluminium and 25% for wood.

The changes stipulated in other directives amending the directives on end-of-life vehicles, on waste electrical and electronic equipment, as well as on batteries and accumulators and waste batteries and accumulators refer primarily to the tasks and possibilities of establishing regulations that help to implement the directives or to mobilize for the implementation of the so-called circular economy. Moreover, it was indicated that certain legal institutions should be reviewed, such as the legal structure of the so-called by-products and the structure of losing the waste status. It was also indicated that a lot more stress needs to be put on actions aimed at preventing the generation of waste in the first place. A very significant, albeit not new, concept of the extended liability of manufacturers has also appeared. It assumes that it is necessary to engage manufacturers in collecting and processing the waste and packaging introduced by them to the market. Thus, imposing some new obligations or burdens on these manufacturers has been envisaged.

Manufacturers, due to the importance of their activity in terms of amounts of waste generated, are supposed to participate in solving this issue. However, this does not require their direct involvement in specific activities regarding waste but may consist in their financial participation formula. The said directive also includes other, specific guidelines, which at the European level have been implemented through the directive primarily amending the Framework Directive and some other directives. This directive 2018/852 was enacted in May 2018 and came into force at the beginning of July 2018. It assumed the standard time of its transposition to the internal law, i.e. the period of 2 years but in Poland (Woźniak, Pactwa, 2018, p. 1–15), for example, this transposition has not been fully concluded until today. At the end of October 2019, a draft Polish law amending the Act on waste and some other acts was made publicly available.

As part of the unification of definitions, the target regarding the preparation of municipal waste for re-use and recycling was raised to 65% by 2030. The targets regarding the preparation of packaging waste for re-use and recycling were also increased, and the objectives set were simplified. It was determined to gradually reduce the share of landfilled municipal waste to 10% by 2030 while legal framework concerning by-products and losing the waste

status were more harmonised and simplified. New measures designed to prevent the generation of waste, including food waste, and to encourage their re-use were envisaged, and minimum conditions of operation for the needs of extended manufacturer's liability were introduced. Additionally, an early warning system to monitor compliance with recycling targets was introduced and reporting obligations were simplified and optimised.

## New initiatives — European Green Deal

As part of the new initiative, in 2019 a new Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, the "European Green Deal"<sup>17</sup> was issued. The "European Green Deal" is a new strategy of the EU for economic growth (Kulczycka, Pędziwiatr, 2019, p. 13). It envisages the transformation of the EU into a just and prosperous society (Chateau, Saint-Martin, 2013, p. 135–136), living in the modern, low-carbon and competitive economy, which in 2050 will reach the zero net greenhouse gas emission, and as a part of which the economic growth will be separated from the use of natural raw materials. What is more, this strategy is aimed at protecting, preserving and improving the EU's natural capital as well as protecting health and wellbeing of citizens against threats and adverse environmental effects.

### Strategic documents

Another document discussing this topic is the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 14 January 2020, COM(2020) 21 final<sup>18</sup>. This Communication also details the Sustainable Europe Investment Plan and the European Green Deal Investment Plan. These documents are of vital importance primarily because at the moment we have the new European Green Deal initiative on the table, which also pays a lot of attention to the matter of waste management. This new European strategy currently takes the form of a Communication from the Commission, which creates certain strategy for EU growth activities and sets quite demanding goals. This strategy aims at turning the EU into a leader of the so-called green growth (Plewa, Giel, Klimek, 2014, p. 8748–8758), green economy (Ryszawska, 2013, p. 47–54). A part of this strategy is also the Sustainable Europe Investment Plan and the European Green Deal Investment Plan, the documents which were launched at the beginning of 2020. This Communication presents the European Green Deal Investment Plan (the picture below), presenting the main directions of action. They include the entire set of activities related to the waste management,

i.e. remodelling of industry and the economy in a manner enabling the implementation of the circular economy concept in a much broader scope.

### The European Green Deal Investment Plan

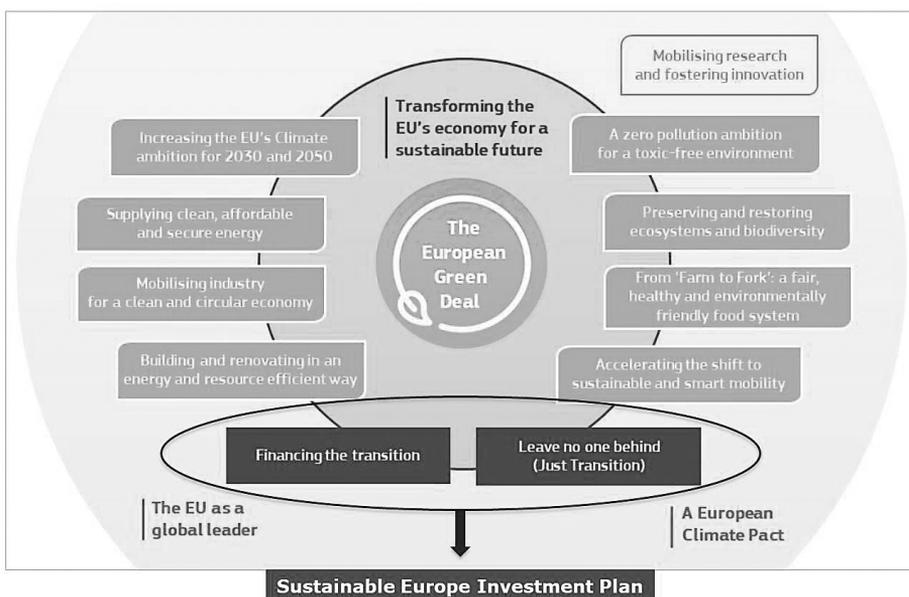
The European Green Deal Investment Plan shown in Figure 2 was formalised by way of another Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions<sup>19</sup>, issued on 11 March 2020. As it was highlighted in the title, it refers to the new EU action plan for promoting the circular economy. This Communication takes a form of a quite extensive document and points to several main directions of activities, discussed in detail but of the nature similar to the Communication indicated at the very beginning of this paper. A certain strategy of activities has been adopted, pointing at specific steps to be taken and indicating, from the purely legal point of view, some necessary legislative measures, which were directed again to the EU authorities. This Communication therefore constitutes the new EU circular economy action plan for cleaner and more competitive Europe. One might also expect that this obligation at the EU level will be relatively quickly fulfilled, i.e. subsequent amendments and new regulations will be launched and will require implementing to the internal law. The problem, however, lies in the fact that many of the EU Member States have not implemented the existing regulations into their legislation until today. The enforcement of the said formal requirements will be another very important practical issue. Currently, certain countries are lagging behind with the implementation

of the previous stages, which will undoubtedly result in further delays at the subsequent stages.

The new stages will be based on the implementation of the activities consisting in reducing the amount of waste, introducing a certain single, uniformed selective collection model that will provide a basis for further waste management and reducing the amount the amount of hazardous substances, all of which will limit the potential adverse effect of waste on humans and the environment. Further stages also involve refining and developing concepts, legal structures and specific regulations that refer to losing the waste and by-product status. It is deemed that presently they are overly restrictive and as such they limit the reintroduction of raw materials obtained from waste into the circulation.

The main directions of activities at the EU level include the framework of sustainable products policy, key product value chains, reduction of waste, as well as adoption of the circular economy to the needs of people and cities. It requires a comprehensive approach and across-the-board activities, taking leadership in this area and steady monitoring of progress (Smol, Kulczycka, Czaplicka-Kotas *et al.*, 2019, p. 165–184). Targets in the reduction of waste amounts for specific streams and other measures for the prevention of waste generation have therefore been set. An EU-wide, uniform model of selective waste collection and labelling aimed at facilitating the selective collection has been provided for and the methods of tracking and minimising the presence of hazardous substances in materials from recycling and in articles made from such materials have been defined. Moreover, the scope of future EU-wide criteria for losing the waste and by-product status has been determined.

Figure 2  
The European Green Deal Investment Plan



Source: Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 14 January 2020, COM(2020) 21 final.

## Conclusions

Considering the above, it is hard to precisely indicate which activities in the area of environmental protection, including circular economy, will be undertaken in the nearest future. The paper presents an overview of concepts and new ideas, while their successful implementation will certainly take longer than initially expected. The activities so far undertaken

do not provide grounds for optimism. While certain European countries such as Denmark, Sweden or Finland have managed to implement the selected elements of green economy, many other countries are lagging behind<sup>20</sup>. Even though it seems possible for the EU to gain the status of the Green Economy leader, it will require many years of collaboration of all the member states in respect of implementing the existing regulations and adopting new strategies.

## Przypisy/Notes

<sup>1</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Towards a Circular Economy: A program "Zero Waste for Europe", European Commission 2014, COM(2014) 398 final.

<sup>2</sup> <https://stat.gov.pl/en/topics/environment-energy/environment/green-economy-indicators-in-poland-2019,3,3.html>

<sup>3</sup> Communication from The Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of The Closing the loop — An EU action plan for the Circular Economy, COM/2015/0614 final.

<sup>4</sup> *Growth within: a circular economy vision for a competitive Europe*, Ellen MacArthur Foundation, McKinsey Centre for Business and Environment and Stiftungsfonds für Umweltökonomie und Nachhaltigkeit (SUN), June 2015.

<sup>5</sup> Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance), OJ L 312, 22.11.2008, p. 3–30.

<sup>6</sup> European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, Official Journal L 365, 31/12/1994, p. 10–23.

<sup>7</sup> Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, Official Journal L 182, 16/07/1999, p. 1–19.

<sup>8</sup> Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles — Commission Statements, Official Journal L 269, 21/10/2000, p. 34–43.

<sup>9</sup> Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (Text with EEA relevance), OJ L 266, 26.9.2006, p. 1–14.

<sup>10</sup> Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) Text with EEA relevance, OJ L 197, 24.7.2012, p. 38–71.

<sup>11</sup> Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste (Text with EEA relevance), PE/11/2018/REV/2, OJ L 150, 14.6.2018, p. 109–140.

<sup>12</sup> Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste, OJ L 182, 16.7.1999, p. 1–19.

<sup>13</sup> European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, Dz. U. L 365 z 31.12.1994, p. 10–23.

<sup>14</sup> Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles — Commission Statements, Official Journal L 269, 21/10/2000, p. 0034–0043.

<sup>15</sup> Commission Implementing Decision (EU) 2019/2193 of 17 December 2019 laying down rules for the calculation, verification and reporting of data and establishing data formats for the purposes of Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (notified under document C(2019) 8995) (Text with EEA relevance), C/2019/8995, L 197/38.

<sup>16</sup> Directive 2013/56/EU of the European Parliament and of the Council amending Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators as regards the placing on the market of portable batteries and accumulators containing cadmium intended for use in cordless power tools, and of button cells with low mercury content, L 329/5.

<sup>17</sup> Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels, 11.12.2019 r. COM (2019) 640 final.

<sup>18</sup> Communication from The Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of The Regions Sustainable Europe Investment Plan European Green Deal Investment Plan, Brussels, 14.01.2020, COM/2020/21 final.

<sup>19</sup> Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, A new Circular Economy Action Plan For a cleaner and more competitive Europe, COM/2020/98 final.

<sup>20</sup> <https://circulareconomy.europa.eu/platform/sites/default/files/ecopreneur-circular-economy-update-report-2019.pdf>

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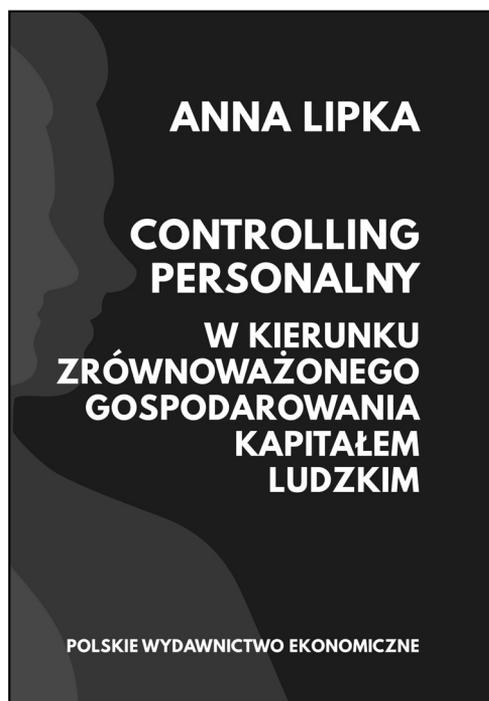
#### Dr Ewelina Badura

Assistant Professor at the Department of Real Estate Law and Tax Law at the Institute of Law at the Krakow University of Economics, attorney-at-law.

#### Dr Ewelina Badura

Adiunkt w Katedrze Prawa Nieruchomości i Prawa Podatkowego w Instytucie Prawa na Uniwersytecie Ekonomicznym w Krakowie, radca prawny.

Polecamy



Przedmiotem rozważań prezentowanych w książce uczyniono najwyższy szczebel w „drabinie controllingu” (wyższy od controllingu kosztów i controllingu jakości), a mianowicie controlling efektywności. Celem książki jest uporządkowanie dość okazałej liczby mierników/wskaźników controllingowych i list kontrolnych dotyczących gospodarowania kapitałem ludzkim według przyjętych w danej organizacji ujęć efektywności, stanowiących dla niej wykładnię tego gospodarowania. Na polskim rynku wydawniczym istnieją wprawdzie (nieliczne zresztą) pozycje dotyczące controllingu personalnego, ale nie skupiają się one na (najtrudniejszym koncepcyjnie i aplikacyjnie) aspekcie efektywnościowym. Monografia — której przedmiotem jest monitorowanie procesów gospodarowania kapitałem ludzkim organizacji pod kątem racjonalności/ekonomiczności — ma zatem wypełnić w pewnej mierze istniejącą lukę i pozwolić praktykom na konstruowanie systemów informatycznych stanowiących podstawę systemu controllingu personalnego. Autorka nie tylko porządkuje controllingowe instrumentarium, lecz także je wzbogaca. Novum stanowi uporządkowanie go nie tylko według efektywności, ale także z podziałem na ilościowy i jakościowy wymiar kapitału ludzkiego z perspektywy jego składowych oraz dualnego charakteru controllingu, a także z perspektywy podziału na controlling operacyjny, taktyczny i strategiczny, a nie według dotychczas

praktykowanego podziału na funkcje personalne. Praca stanowi próbę rozwinięcia następującej głównej tezy: w controllingowych ujęciach różnych procesów gospodarowania kapitałem ludzkim zorientowanych na maksymalizowanie wartości tego kapitału nie jest jeszcze dostatecznie zakotwiczona koncepcja integrująca podejście celowościowe i systemowe (koncepcja interesariuszy), zgodna z ideą zrównoważonego gospodarowania kapitałem ludzkim.

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