# PRACE NAUKOWE

Uniwersytetu Ekonomicznego we Wrocławiu

# RESEARCH PAPERS

of Wrocław University of Economics

Nr 397

Finance and Accounting for Sustainable Development – Responsibility, Ethic, Financial Stability

> edited by Jarosław Dziuba Teresa Orzeszko

Copy-editing: Marcin Orszulak Layout: Barbara Łopusiewicz Proof-reading: Barbara Cibis

Typesetting: Małgorzata Czupryńska

Cover design: Beata Dębska

The present publication is partially funded by the Regional Environment Protection and Water Resource Management Fund in Wrocław
Publikacja dofinansowana ze środków Wojewódzkiego Funduszu Ochrony Środowiska i Gospodarki Wodnej we Wrocławiu



### Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej we Wrocławiu

Authors' opinions and articles' content do not always represent the official stance of the Regional Environment Protection and Water Resource Management Fund Poglądy autorów i treści zawarte w publikacji nie zawsze odzwierciedlają stanowisko WFOŚiGW we Wrocławiu

Information on submitting and reviewing papers is available on the Publishing House's website www.pracenaukowe.ue.wroc.pl www.wydawnictwo.ue.wroc.pl

The publication is distributed under the Creative Commons Attribution 3.0 Attribution-NonCommercial-NoDerivs CC BY-NC-ND



© Copyright by Wrocław University of Economics Wrocław 2015

ISSN 1899-3192 e- ISSN 2392-0041

ISBN 978-83-7695-521-6

The original version: printed

Publication may be ordered in Publishing House tel./fax 71 36-80-602; e-mail: econbook@ue.wroc.pl www.ksiegarnia.ue.wroc.pl

Printing: TOTEM

## Contents

Introduction
Jacek Adamek: <i>Halal</i> food market vs. Polish meat producers. On the dissimilarities in approaching the idea of sustainable development
Arkadiusz Babczuk: Debt of municipal companies in Poland in the light of research
Melania Bak: Social responsibility of accounting vs. corporate image  Piotr Bolibok: Value relevance of impairment provisions in the Polish banking sector
Grażyna Borys: Selected directions of increasing efficiency in supporting thermomodernization in buildings from public funding
Alicja Janusz, Teresa Orzeszko: Education as an operation area of domestic listed bank foundations
Joanna Kogut: Directions of changes in SME accounting in accordance with the amended Accounting Act
Robert Kurek: Bitcoin vs. legal and tax regulations in Poland and worldwide Agnieszka Łukasiewicz-Kamińska: Digital currencies and their impact on monetary systems.
Malgorzata A. Olszak, Mateusz Pipień, Sylwia Roszkowska: Do loan loss provisions accounting and procyclicality matter for the effects of capital on loan growth of big banks in the European Union?
<b>Malgorzata Solarz:</b> Equity release type of financial services in the context of the intergenerational justice principle
Streszczenia
Jacek Adamek: Rynek żywności <i>halal</i> a polscy producenci mięsa. O odmienności pojmowania idei zrównoważonego rozwoju

Contents

Arkadiusz Babczuk: Zadłużenie spółek komunalnych w świetle badań	20
Melania Bąk: Społeczna odpowiedzialność rachunkowości a wizerunek	
przedsiębiorstwa	45
Piotr Bolibok: Znaczenie odpisów aktualizujących z tytułu utraty wartości	
i rezerw dla wartości rynkowej w polskim sektorze bankowym	58
Grażyna Borys: Wybrane kierunki zwiększenia efektywności wspierania ter-	
momodernizacji w budynkach ze środków publicznych	68
Jarosław Dziuba: Aspekty ekologiczne w systemie podatków lokalnych i po-	
lityce podatkowej miast na prawach powiatu w Polsce	78
Elżbieta Hajduga: Ubezpieczenie społeczne rolników a koncepcja zrówno-	
ważonego rozwoju	89
Alicja Janusz, Teresa Orzeszko: Edukacja jako obszar działania fundacji	
krajowych banków giełdowych	100
Joanna Kogut: Zmiany ustawy o rachunkowości i ich wpływ na poprawę	
warunków wykonywania działalności gospodarczej	126
Andrzej Koza: Dotacje do zatrudnienia jako instrument przeciwdziałania	
bezrobociu osób niepełnosprawnych w Czechach i w Polsce	138
<b>Robert Kurek:</b> Bitcoin a regulacje prawno-podatkowe w Polsce i na świecie.	153
Agnieszka Łukasiewicz-Kamińska: Waluty cyfrowe i ich wpływ na syste-	
my monetarne	162
Małgorzata A. Olszak, Mateusz Pipień, Sylwia Roszkowska: Czy specyfi-	
ka zastosowania rezerw na ryzyko kredytowe i ich procykliczność wpły-	
wają na związek między aktywnością kredytową i kapitałami dużych ban-	
ków w Unii Europejskiej?	171
Małgorzata Solarz: Usługi finansowe typu equity release w kontekście zasa-	
dy sprawiedliwości międzypokoleniowej	182
,, r, r	- 0 -

## PRACE NAUKOWE UNIWERSYTETU EKONOMICZNEGO WE WROCŁAWIU RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS nr 397 • 2015

Finance and Accounting for Sustainable Development – Responsibility, Ethic, Financial Stability

ISSN 1899-3192 e-ISSN 2392-0041

#### Jarosław Dziuba

Wrocław University of Economics e-mail: jaroslaw.dziuba@ue.wroc.pl

# ENVIRONMENTAL ASPECTS IN THE SYSTEM OF LOCAL TAXES AND TAX POLICY OF CITIES WITH THE *POWIAT* STATUS IN POLAND

## ASPEKTY EKOLOGICZNE W SYSTEMIE PODATKÓW LOKALNYCH I POLITYCE PODATKOWEJ MIAST NA PRAWACH POWIATU W POLSCE

DOI: 10.15611/pn.2015.397.06

**Summary:** The purpose of this article is to present environmental solutions built into the local tax system and the evaluation of local government tax policy from the environmental perspective based on the example of cities with the *powiat* status in Poland (66 units). The structure of local taxes offers solutions of pro-environmental nature. This, however, refers only to the taxes in the case of which the executive body of local government unit remains the tax authority. The environmental aspect is mostly visible in statutory catalogs of tax exemptions and in determining tax rates, especially regarding motor vehicle tax and, to a lesser extent, also real estate tax and forest tax. Tax policy carried out by the analyzed units should be evaluated in this regard as not particularly active (except for the motor vehicle tax). This partly results from the fact that the stimulating function of taxes remains contrary to their fundamental, i.e. fiscal function.

**Keywords:** local self-government, environment protection, local taxes, tax policy.

Streszczenie: Celem artykułu jest przedstawienie rozwiązań proekologicznych, wbudowanych w system podatków lokalnych, oraz ocena samorządowej polityki podatkowej z ekologicznego punktu widzenia na przykładzie miast na prawach powiatu w Polsce (66 jednostek). W konstrukcji podatków lokalnych istnieją rozwiązania mające charakter proekologiczny. Dotyczy to jednak tylko podatków, dla których organem podatkowym jest organ wykonawczy jednostki samorządu terytorialnego. Aspekt ekologiczny widoczny jest przede wszystkim w ustawowych katalogach zwolnień podatkowych oraz w sposobie ukształtowania stawek podatków, szczególnie w przypadku podatku od środków transportowych, a w mniejszym zakresie także podatku od nieruchomości i podatku leśnym. Politykę podatkową badanych jednostek należy ocenić pod tym względem jako mało aktywną (z wyjątkiem podatku od środków transportowych). Wynika to po części z tego, że funkcja stymulacyjna podatków stoi w opozycji do ich podstawowej funkcji, czyli fiskalnej.

Słowa kluczowe: samorząd terytorialny, ochrona środowiska, podatki lokalne, polityka podatkowa

#### 1. Introduction

Municipalities (including cities with the *powiat* status¹) are obliged to carry out environmental activities pursuant to the provisions of legislation in force. Among them the Law dated 8 March 1990 on municipal authorities [Ustawa z dnia 8 marca 1990 r.] should be listed. It provides for tasks to be carried out by municipalities in the area of environment and nature protection. Moreover, pursuant to the Environment Protection Law dated 27 April 2001 (Art. 17) [Ustawa z dnia 27 kwietnia 2001 r.], local government units create environment protection programs for the implementation of national environmental policy. Apart from the environment oriented objectives and priorities, they also cover adequate means, mechanisms and tools indispensable to achieve the set goals.

Among them legal and administrative tools should be included (e.g. permits, licenses, prohibitions and restrictions, ordinances, environmental procedures) and social impact tools (e.g. environmental education, information availability about the environment, social pressure, social consultancy and public debate, environmental lobbing and sponsorship), as well as voluntary instruments (e.g. environment specific recommendations) and economic tools, mainly including the financial ones [Poskrobko B., Poskrobko T. 2012, pp. 119–121]. From the perspective of a local government's budget, they can take the form of income oriented tools (e.g. environmental fees and taxes, administrative penalties) and expenditure oriented tools such as various so-called direct subsidies (e.g. grants, preferential loans and credits, subsidized credits, guarantees and warranties). Financial tools are also included in the tax system structure in the form of tax exclusions, reductions and exemptions, differentiated tax rates, i.e. so-called indirect subsidies which do not aim at direct provisioning of cash to entities, but at reducing expenditure of the beneficiary obtaining such aid [Kożuch 2013, p. 69]. Their scope also covers tax policy tools at the disposal of local authorities pursuant to the granted statutory powers to tax. Environmental significance of tax instruments results mainly from the incentive oriented (stimulating) function of taxes focused on encouraging entities towards taking rational advantage of environmental assets and resources.

Therefore, the purpose of this article is to present environmental solutions built into the local tax system and the evaluation of local government tax policy from environmental perspective based on the example of cities with the *powiat* status in Poland (66 units). The conclusions presented in the article result from the analysis of tax legislation as well as local laws (tax resolutions covering cities with the *powiat* status in the period 2013–2015).

<sup>&</sup>lt;sup>1</sup> The city with the *powiat* status (Polish: *miasto na prawach powiatu*, lit.: city with *powiat* rights, city with county rights, city county) is a city in Poland that has the status of a *powiat*. A *powiat* is the second-level unit of local government and administrative division in Poland, equivalent to a county, district, canton in other countries (LAU level 1, formerly NUTS level 4).

#### 2. Environmental aspects of local tax structure

Local taxes in Poland remain the source of income for the lowest level of local authorities only, i.e. municipalities (including cities with the *powiat* status). Generally, they cover real estate tax, motor vehicle tax, agricultural tax, forest tax, income tax from natural persons paid in the form of a tax card, tax on inheritance and donations as well as civil law activities tax. Their structure is regulated by laws, the provisions of which specify mainly the components of taxation techniques and thus influence the scope of powers to tax and the possibilities of creating tax policy by municipalities also including environmental objectives.

In the case of **real estate tax**, environmental aspects are visible in several components of its structure, pursuant to the Law dated 12 January 1991 on local taxes and fees [Ustawa z dnia 12 stycznia 1991]. Firstly, the maximum statutory tax rate on land used for lakes and retention water reservoirs or hydropower plants is much lower from the rates for other land. For example, in 2015 it amounts to PLN 4.58 per 1 ha (i.e. PLN 0.000458 per 1 m²), whereas the rate on land used for running a business is PLN 0.90 per 1 m² and for other land PLN 0.47 per 1 m², respectively. About 1000-fold difference presents obvious preference for objects subject to pro-environmental taxation. A municipal council can adopt rates at a statutory level or reduce them following various reasons, including the environmental ones. A council is also entitled to differentiate tax rates based on certain object specific criteria, such as e.g.:

- for land location, type of carried out business, type of buildings, their purpose and usage;
- for buildings location, usage, construction type, technical condition, age, type of carried out business;
- for constructions type of carried out business.

An extensive degree of generalization, in terms of possible criteria for tax rate differentiation, provided by the law also offers vast opportunities for the application of environmental considerations.

Secondly, the statutory catalog of tax exemptions includes the ones covering land, buildings and construction structures, the nature and purpose of which is proenvironmental. Tax exemptions cover as follows:

- 1) utility buildings or their parts used for forestry or fishing activities;
- 2) land located in the area covered by strict, either active or landscape, protection as well as buildings and constructions permanently attached to the land aimed directly at achieving goals in the area of environment protection in national parks and nature reserves;
- 3) owned by the State Treasury: land covered by lakes of continuous surface water inflow or outflow as well as land covered by artificial water reservoirs;
- 4) constructions of levees, land they cover and inter-levee land, excluding the ones used for running a business by other entities than water companies, their associations and levee oriented associations;

5) wasteland, ecological land, wooded land excluding land used for running a business.

An important entitlement, in terms of power to tax, is the possibility of introducing other exemptions than the statutory ones by a municipal council, pursuant to an adopted resolution. They can be of objective nature exclusively and also refer to other aspects related to environment protection.

Environmental aspects were also taken into account in the structure of **motor vehicle tax**, which is regulated by the Law on Local Taxes and Fees. Firstly, the statutory (maximum) rates are increasing along with the permissible gross weight of motor vehicles, whereas in the case of busses depend on the number of seats. If it is assumed that larger and heavier vehicles exert more extensive negative impacts on the environment (due to e.g. greater emission of exhaust fumes and noise), then such a method of determining rates is evidently pro-environmental. Rates range significantly and in 2015 the maximum rate for a truck of permissible gross weight above 12 tons PLN 3,138.07) remains over 282% higher than the rate for a vehicle of permissible gross weight from 3.5 up to 5.5 tons (PLN 821.45).

The law provides for municipal council competencies in determining tax rates which, however, may not exceed the maximum ones, and also for their further differentiation but only for motor vehicles with permissible gross weight below 12 tons and busses based on the objective criteria among which the following can be listed: natural environment impact, production year, number of seats. Moreover, municipal councils can also adopt other reasons. Such competencies cause that in practice the differences between actual rates can be even larger and thus, in a way, strengthen the incentive function of the tax in question.

Environmental aspects are not listed in the statutory catalog of tax exemptions; however, the law, just like in the case of real estate tax, enables a municipal council to implement object oriented tax exemptions, other than the statutory ones. This entitlement does not refer to motor vehicles of permissible gross weight above 12 tons (excluding busses).

Moreover, the law provides for obtaining the refund of tax paid if a taxpayer uses combined transport.<sup>2</sup> The refund may amount to 25, 50, 75 or 100% of the tax paid depending on the number of runs with or without load, made by the means of transport as rail carriage in a particular tax year. The subject literature emphasizes the need for taking advantage of combined transport in order to e.g. protect natural environment [Mazur 2013, p. 192]. Offering tax a refund in its construction can function as an incentive encouraging to choose railway as the means of transport which results in lower environmental burden.

<sup>&</sup>lt;sup>2</sup> Combined transport means the form of transport in which the major part of transport is carried out by railway, inland waterway and maritime transport, while the initial and/or final part is covered by road transport remaining as short as possible.

Environmental fiscal incentives in **agricultural tax** are visible in the exemption and tax relief component only provided by the Law dated 15 November 1984 on agricultural tax [Ustawa z dnia 15 listopada 1984]. Tax exemptions cover, among others, woodlands on agricultural land, ecological land, land covered by water reservoirs to supply population with water, land covered by levees as well as interlevee land.

Additionally, the Law provides for the possibility of using tax relief for capital expenditure spent on e.g. the construction and modernization of facilities for environment protection, as well as the purchase and installation of irrigation and drainage machines, water supply devices for households and also devices facilitating the usage of natural energy sources for manufacturing purposes (wind, biogas, sunlight, falling water). Tax relief can be used provided no other financing or co-financing of expenditure from public means is obtained. The relief level amounts to 25% of investments documented by invoices. A municipal council is also entitled to implement other tax exemptions or object oriented reliefs.

The regulations referring to **forest tax**, pursuant to the Law dated 30 October 2002 on forest tax [Ustawa z dnia 30 października 2002], include environment protection aspects regarding two elements. Firstly, tax rate is reduced by 50% in the case of protective forests and those covered by nature reservoirs and national parks. Secondly, forest stands under 40 years of age, forests entered individually in the relics of the past register and ecological land are covered by tax exemptions. Similarly to the above-mentioned types of taxes, also in the case of forest tax, the municipal council can implement other object oriented exemptions.

The municipality executive body, i.e. village head, mayor or city president, represent tax authorities responsible for collecting the discussed taxes. Pursuant to the Law dated 29 August 1997 on tax ordinance [Ustawa z dnia 29 sierpnia 1997] and executive regulations the municipality executive body has certain competencies which are generally uniform for each tax and consist in the possibility of exempting a taxpayer from the obligation of tax collection, deferred payment, payment in installments, cancellation of all or part of the tax arrears and interest. These instruments are taken advantage of following the application filled by a taxpayer and just the generally determined reasons for their implementation, such as "vital interest of a taxpayer" or "public interest" offer extensive freedom in strictly discretionary decision-making.

Municipal bodies are not entitled to any powers regarding other local taxes (inheritance and endowment tax, civil law activities tax, income tax on natural persons, tax paid in the form of a tax card) for which the Head of Revenue Office remains the adequate tax authority. The statutory structure of such taxes provides for environmental aspects only in the case of **civil law activities tax**. A property sales contract or perpetual usufruct concluded in connection with claims arising from restrictions in property usage based on environment protection provisions are subject to tax exclusion. On the other hand, tax exemption is applied in the case of property

sales (perpetual usufruct) purchased earlier based on environment protection and impact provisions if the former owner (perpetual user) remains the buyer.

As G. Borys indicates: "the application of tax technique components as an incentive for pro-environmental actions does not authorize to conclude that tax equipped in such components represents an **ecological tax**" [Borys 2006, p. 58]. The abundant subject literature discussing these problems emphasizes an extensive difficulty in specifying this financial category essence precisely [Małecki 2012, p. 28]. At this point, such debatable criteria can be referred to as e.g.:

- tax oriented encouragement towards activities beneficial from the perspective of environment protection;
- generating financial needs allocated to projects in the area of environment protection;
- an object of tax associated with natural environment impacts [Bartniczak, Ptak 2011, p. 43].

In accordance with the Eurostat definition, "an environmental tax is a tax whose base is a physical unit (or a proxy of a physical unit) of something that has proven, specific negative impact on the environment, and which is identified in ESA as a tax" [Eurostat 2013, p. 9]. Some authors tend to extend the scope of this definition by the usage of natural environment resources. Based on the above, local environmental taxes covers motor vehicle tax, due to negative impact on the environment exerted by motor vehicles, as well as agricultural and forest taxes since both forests and agricultural land constitute natural environment resources used for economic purposes [Małecki 2011, p. 81]. It is debatable, however, whether real estate tax should be included here [Małecki 2012, p. 171], even though in some studies discussing environmental taxes this tax is also covered since some related fiscal preferences have positive environmental impacts [see Bartniczak, Ptak 2011, pp. 219–220; Małecki 2012, p. 189].

# 3. Environmental aspects in the tax policy of cities with country rights

Limited power to tax provided by the legislator to municipalities results in local taxes which, apart from their exclusively fiscal function, can also perform other functions, e.g. a stimulating one and thus should be listed in the catalog of tools used for environment protection. Hence a question arises whether the current tax policy carried out by local authorities presents any manifestations of pro-environmental policy within the framework of executed powers.

The possibilities for influencing local tax structure by local authorities in the studied period were commonly used in terms of determining tax rates, differentiating them based on various criteria and applying non-statutory tax exemptions. Unfortunately, the basis for making decisions of pro-environmental nature was used to a limited extent.

In the case of **real estate tax**, environmental aspects are only incidentally noticeable, both in terms of non-statutory exemptions and tax rates differentiation. In the city of Wrocław tax exemptions apply to e.g.:

- land constituting green areas, kitchen gardens, owned by Wrocław municipality or the State Treasury, not under perpetual usufruct, usage, lending, renting or lease;
- land, buildings and constructions used for permanent exhibition of animals aimed at ensuring proper living, care and breeding conditions for animals in order to protect them and to conduct research and scientific activities in breeding, reproduction and protection of animal species which are endangered, threatened with extinction and not found in nature.

Moreover, in the cities of Chorzów and Siemianowice Śląskie tax exemptions refer to the land under surface standing waters, in Lublin to the land covered by retention ponds, whereas in the cities of Tarnobrzeg, Rybnik and Kalisz to the land, buildings and constructions used for the needs of fire protection. In each case exemption does not, however, cover business related parts.

As far as pro-environmental differentiation of tax rates is concerned, they are most extensive in the case of constructions related to water supply and/or sewage disposal. In the period 2013–2015 such tax rate reduction occurred, however, in five cities only, i.e. in: Krosno, Sopot, Katowice, Rybnik and Elbląg. In the first three cities the rates were relatively stable in the entire analyzed period, whereas in the following two cities they were raised annually approaching the statutory ones (see Table 1). The highest reduction scale against the statutory rate occurred in the city of Rybnik and the lowest one in Katowice.

**Table 1.** Real estate tax rates (%) in cities with the powiat status which applied reduced tax rates for constructions related to water supply and/or sewage disposal

City	Standard rate	Reduced rate			Down and of a construction
		2013	2014	2015	Purpose of a construction
Krosno	2	1	1	1	Sewage disposal
Sopot	2	1	1	1	Water supply and sewage disposal
Katowice	2	1.75	1.75	1.75	Water supply and sewage disposal
Rybnik	2	0.25	0.5	0.75	Sewage disposal
Elbląg	2	0.1	0.5	0.75	Water supply
	2	1	1	1	Sewage disposal

Source: author's compilation based on tax resolutions of cities with the *powiat* status in the period 2013–2015.

In the case of buildings only two preferential rates of real estate tax, related to environmental goals, were recorded. The first one was applied in 2013 in the city of Jelenia Góra and covered residential buildings where ecological heating (electrical,

gas, oil, wind and solar) was installed. The reduction scale was significant since the rate (PLN 0.47) was by over 35% lower than the standard one (PLN 0.73). Unfortunately, this tax incentive, motivating for the modernization of heating systems into the more environmentally friendly ones, was eliminated. Such a move should be critically evaluated, especially that the city, owing to its specific geographic location (inter-mountain valley), has been facing the continuous problem of air pollution with particulate matter originating from the so-called low emission (individual coal-fired boilers, furnaces, domestic hearths) [*Program Ochrony Środowiska...* 2013, p. 41].

The second case of reduced tax rate application for buildings is the preferential approach to buildings used for stables of racing, sport and recreational horses. Tax rate for this object of taxation, in the entire researched period, amounted to PLN 2.7, which constituted only several percent of the base rate.

Environmental aspects in differentiated rates for land occurred in one case only – in the city of Kielce. The reduced rate applies to the land located in the area of intermediate protection in the water intake protected zone. It amounts to PLN 0.05, which constitutes about 14% of the basic rate (PLN 0.35). The lower rate does not, however, apply to the land used for running a business and land under multi-family residential buildings.

Environmental aspects had a much larger impact on **motor vehicle tax** determined by city authorities. These units were quite commonly applying tax rate differentiation based on the criteria listed in the law, i.e. environmental impacts and vehicle production year (see Table 2). In the first case EURO standards were most frequently referred to as specifying permissible values of exhaust fumes emission in vehicles sold in the area of the European Union. In some cities it covered only the vehicles meeting the most restrictive EURO 5 and 6 standards (Wrocław, Kraków, Krosno, Czestochowa, Olsztym, Poznań).

Sometimes preferential rates were applied to vehicles equipped in devices reducing the emission of exhaust fumes (e.g. catalytic converters), gas-fittings, electric drive or biofuel. In the city of Ostrołęka lower rates are also applied if a vehicle has a device for engine noise reduction. In Tarnobrzeg, on the other hand, the general criterion of a vehicle being equipped with "devices having an impact on environment protection" was used, whereas in Leszno "devices for exhaust fumes emission reduction." In many cases the above-mentioned criteria are considered jointly in the process of determining tax rates by the city authorities (e.g. Ostrołęka, Toruń, Opole).

In the case of vehicle production year as a criterion for rates differentiation, the scheme of higher rates for older vehicles was used only. This criterion was applied by 17 units and it was significantly diversified. For example, in the city of Płock the year 1990 was referred to as the threshold, whereas in Warsaw – 2012, respectively. Such a system of tax rates determining does also emphasize environmental aspects, since it assumes that newer vehicles are less harmful for the environment, because they e.g. meet more restrictive environmental standards, remain more modern, more economical and less frequently prone to break downs.

**Table 2.** Cities with the *powiat* status which apply preferential rates of motor vehicle tax according to the criteria used in the period 2013–2015

The criterion for preferential rate application	Cities with the <i>powiat</i> status
EURO emission standards	Legnica, Wrocław, Bydgoszcz, Toruń, Lublin, Łódź, Skierniewice, Kraków, Radom, Siedlce, Opole, Krosno, Rzeszów, Gdańsk, Sopot, Chorzów, Katowice, Piekary Śl., Rybnik, Poznań, Koszalin, Szczecin, Częstochowa, Kielce, Olsztyn
Catalytic converters	Toruń, Ostrołęka, Płock, Piekary Śl., Szczecin
Gas-fittings	Lublin, Skierniewice, Opole, Toruń, Ostrołęka
Electric drive	Ostrołęka, Lublin
Biofuel drive	Ostrołęka
Production year	Legnica, Toruń, Zielona Góra, Skierniewice, Ostrołęka, Płock, Radom, Siedlce, Opole, Krosno, Słupsk, Chorzów, Dąbrowa Górnicza, Jastrzębie Zdrój, Warszawa, Bydgoszcz, Gdynia
Devices for exhaust fumes emission reduction	Leszno
Devices having impact on environment protection	Tarnobrzeg
None	Jelenia Góra, Wałbrzych, Biała Podlaska, Grudziądz, Włocławek, Chełm, Zamość, Gorzów Wlkp., Piotrków Tryb., Nowy Sącz, Tarnów, Przemyśl, Białystok, Łomża, Suwałki, Bielsko-Biała, Bytom, Mysłowice, Siemianowice Śląskie, Świętochłowice, Tychy, Zabrze, Żory, Elbląg, Kalisz, Konin, Gliwice, Ruda Śląska, Jaworzno, Świnoujście

Source: author's compilation based on tax resolutions of cities with the *powiat* status in the period 2013–2015.

The scale of tax rate reductions, based on the discussed criteria, was significantly diversified. In the majority of cities preferential rates were lower than the standard ones from a few to several percent, however, e.g. in such cities as Wrocław, Toruń, Kraków, Olsztyn, Poznań the reduction amounted from 50% to over 60% depending on the vehicle type. In the case of 30 units the differentiation of rates for environmental reasons was not applied.

Motor vehicle tax exemption for the reasons of environment protection was used in one case only – in 2015 in Kraków. It covers vehicles of permissible total weight below 12 tons and busses with electric drive.

Tax policy of cities with the *powiat* status, regarding other local taxes, was practically absent. Few cases of rye purchase price reduction were recorded (e.g. Kalisz, Konin, Koszalin, Krosno, Rybnik, Piekary Śląskie) in order to determine

agricultural tax rate in the city; however, it remains doubtful whether environmental reasons should be attributed to these decisions.

The analysis of tax policy of cities with the *powiat* status did not cover the discretionary instruments within the powers of tax authority. The application of such tools usually does not result from the performed ecological policy and therefore cannot constitute the basis for the evaluation of tax policy carried out by local authorities.

#### 4. Final remarks

The tax system implemented by local authorities includes taxes regarded as proenvironmental ones and the mere fact of their existence results in certain impacts for the natural environment. Moreover, the structure of local taxes offers solutions of pro-environmental nature. This, however, refers only to the taxes in the case of which the executive body of local government unit remains the tax authority. The environmental aspect is mostly visible in statutory catalogs of tax exemptions which occur in the case of taxes referring to land. The example of a certain consistent proenvironmental conception in the tax law is the exemption of the so-called ecological land from all three taxes covering land, i.e. real estate tax, agricultural tax and forest tax. The environmental aspect is also present in determining tax rates, especially regarding motor vehicle tax and, to a lesser extent, also real estate tax and forest tax.

The competencies of local government units, in terms of influencing taxes, remain limited to the possibility of tax rates determining and differentiation as well as establishing additional exemptions in question. The application of the discussed tools for environmental purposes was diversified in the analyzed cities. They were most extensively used for differentiating motor vehicle tax rates following proenvironmental criteria only. Tax rates reduction in the case of vehicles less harmful for the environment was applied, in the period under analysis, by 36 cities, i.e. 55% units. Non-statutory exemptions for pro-ecological purposes were only occasionally used, both in the case of real estate tax and motor vehicle tax, whereas no proenvironmental decisions were recorded regarding agricultural tax and forest tax.

Tax policy carried out by the analyzed units should be evaluated in this regard as not particularly active (except for motor vehicle tax). This partly results from the fact that the stimulating function of taxes remains contrary to their fundamental, i.e. fiscal function.

The recommendation for including certain pro-environmental tax preferences in the tax system results from the Environment Protection Law, which states, in Art. 283, item 1, that "tax rates and other public contributions should be differentiated taking into account the objectives focused on environment protection." This provision is of aspirational nature only and the subject literature emphasizes that the discussed tax tools were not created systemically and targeted to implement environmental policy objectives [Małecki 2012, p. 182]. They are included in a large number of tax law provisions, frequently as an aftermath of many reliefs and exemptions, which

significantly impedes their application and thus the stimulation of implementing proenvironmental activities [Famielec (ed.) 2005, p. 100].

Moreover, the conducted research on public pro-environmental subsides results in the conclusion about low environmental efficiency of indirect subsidies and their debatable impact on the reduction of pollution emission or lower consumption of natural resources. It is emphasized that in spite of their variety they are of limited significance along with high costs of the state functioning. Hence, some authors suggest their abolition which could allow for narrowing down the scope of subsidizing, for sealing up the tax system, increasing budget revenues and simplifying the system of environment protection financing [Kożuch 2013, p. 180].

#### References

Bartniczak B., Ptak M., 2011, Opłaty i podatki ekologiczne. Teoria i praktyka, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.

Borys G., 2006, *Dyskusja na temat pojęcia i istoty podatków ekologicznych*, [in:] Borys T. (ed.), Gospodarka a Środowisko 5, Prace Naukowe Akademii Ekonomicznej we Wrocławiu nr 1115, Wyd. Akademii Ekonomicznej we Wrocławiu, Wrocław.

Eurostat, 2013, *Environmental Taxes – A Statistical Guide*, Publications Office of the European Union, Luxembourg.

Famielec J. (ed.), 2005, *System finansowania ochrony środowiska w Polsce*, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków.

Kożuch M., 2013, Subsydiowanie ochrony środowiska przyrodniczego w gospodarce rynkowej. Doświadczenia Polski, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków.

Małecki P., 2011, *Podatki ekologiczne w Polsce w latach 2002–2008*, [w:] Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, nr 875. Finanse, Wydawnictwo UE w Krakowie.

Małecki P., 2012, *System opłat i podatków ekologicznych w Polsce na tle rozwiązań w krajach OECD*, Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, Kraków.

Mazur E., 2013, *Ekologiczne aspekty transportu kombinowanego*, Zeszyty Naukowe. Problemy Transportu i Logistyki Nr 22, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin.

Poskrobko B., Poskrobko T., 2012, Zarządzanie środowiskiem w Polsce, PWE, Warszawa.

Program Ochrony Środowiska dla Miasta Jelenia Góra na lata 2013–2016 z perspektywą do 2020 roku, Uchwała nr 372.XXXVII.2013 Rady Miejskiej Jeleniej Góry z dnia 23 kwietnia 2013 r. w sprawie przyjęcia Programu Ochrony Środowiska dla Miasta Jelenia Góra na lata 2013–2016 z perspektywą do 2020 roku. Ustawa z dnia 8 marca 1990 r. o samorządzie gminnym, Dz.U. z 2013 r., poz. 594.

Ustawa z dnia 12 stycznia 1991 r. o podatkach i opłatach lokalnych, Dz.U. z 2014 r., poz. 150.

Ustawa z dnia 15 listopada 1984 r. o podatku rolnym, Dz.U. z 2013 r. poz. 1381 z późn. zm.

Ustawa z dnia 29 sierpnia 1997 r. Ordynacja podatkowa, Dz.U. z 2015 r., poz. 613.

Ustawa z dnia 27 kwietnia 2001 r. Prawo ochrony środowiska, Dz.U. z 2013 r. poz. 1232 z późn. zm. Ustawa z dnia 30 października 2002 r. o podatku leśnym, Dz.U. z 2013 r. poz. 465.