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7. Međunarodni znanstveni simpozij
GOSPODARSTVO ISTOČNE HRVATSKE - VIZIJA I RAZVOJ

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ECONOMY OF EASTERN CROATIA - VISION AND GROWTH

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Sadržaj / Content

Predgovor

Sedmi Međunarodni znanstveni simpozij „GOSPODARSTVO ISTOČNE HRVATSKE - VIZIJA I RAZVOJ“ je platforma koja će i ove godine okupiti eminentne znanstvenike, doktorande kandidate i lidere da iznesu nove ideje i stručne preporuke u rješavanju značajnih ekonomskih izazova. Znanstveni simpozij se održava u vrijeme mogućeg zaokreta (engl. *turning point*) kada postoje indikacije vidljivog napretka, pozitivnog zaokreta u gospodarskom razvoju. Pojedine tvrtke dobivaju nagrade i priznanja za uspješan rad i razvoj; javljaju se novi poduzetnici; poljoprivreda pronalazi svoj plasman; te postoji nada za izgled porasta zaposlenosti.

Ali kako „od dobrog uvijek treba težiti boljem“, nastojati ćemo ponovo, uvijek, i svake godine tražiti od sudionika nove analize, nove prijedloge i vizije u pokretanju razvoja.

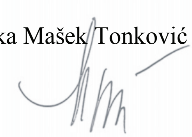
Ovogodišnji nobelovac za ekonomiju Richard Thaler u poveznici između ekonomskih i psiholoških analiza, indirektnom sugestijom izbora usmjerava donošenje pravih odluka (engl. *nudging*), koje mogu pokrenuti čitavu naciju.

Najvažniji aspekt njegovoga rada je „to što pokazuje da su ekonomski akteri ljudi“. Kako mi imamo potencijala u ljudskom kapitalu, ulaganje u njihova postignuća i pametne specijalizacije, s primjenom suvremene tehnologije u proizvodnji i preradi, trebaju biti svjetla točka za razvoj u budućnost.

Istočna Hrvatska ima potencijale višestrukog razvoja, uz prirodne resurse, primarne proizvodnje, tradicionalnih ekoloških proizvoda hrane i gastro ponude, arheološka nalazišta, kulturne spomeničke i sakralne baštine koje nisu dovoljno iskorištene. Poznata lječilišta su idealna za razvoj zdravstvenog turizma, rijeke Drava, Sava i Dunav, Kopački rit – jedini sačuvani prirodno netaknuti rezervat i nacionalni park u Europi, mogu biti atraktivna turistička ponuda, što treba iskoristiti u planiranju razvoja. Organiziranom ponudom, možemo postati poželjne turističke destinacije, čija sezona traje cijelu godinu.

Svi radovi koji pristignu na ovaj Simpozij i budu nakon recenzije prihvaćeni, trebali bi kreirati “nudge”, pomoćni materijal koji bi mogao usmjeriti donošenje uspješne dugoročne politike ekonomskog razvoja, kako istočne Hrvatske, tako i cijele RH.

Prof. dr. sc. Anka Mašek Tonković



Foreword

The seventh International Scientific Symposium “ECONOMY OF EASTERN CROATIA - VISION AND DEVELOPMENT” is a platform that will gather this year eminent scientists, doctoral candidates and leaders to present new ideas and expert recommendations in addressing significant economic challenges. The Scientific Symposium is held at the time of a possible turning point, when there are indications of visible progress, a positive turnaround in economic development. Certain companies are awarded and recognized for their successful work and development, new entrepreneurs emerge, agriculture finds its placement, and there is a hope for employment growth.

But, since “we always need to strive for the better”, we will try, year and year again, to ask participants for new analyses, new suggestions and visions to launch the development.

This year's Nobel Laureate for Economics Richard Thaler in the link between economic and psychological analysis, through indirect suggestion of choices nudges towards making the right decisions, which can trigger the whole nation.

The most important aspect of his work is “that it shows the economic stakeholders are people”. Since we have a potential in human capital, investing into their achievements and smart specialization, and applying modern technology in production and processing, should be a bright spot for future development.

Eastern Croatia has got multiple development potentials, along with natural resources, primary production, traditional organic food products and gastronomical offerings, archaeological sites, cultural, monumental and sacral heritage which have not been sufficiently used thus far. Famous health resorts are ideal for development of health tourism, Drava, Sava and Danube rivers and Kopačkirit - the only preserved and untouched nature reserve or national park in Europe, can be an attractive tourist offer, which should be used in development planning. We can become attractive tourist destinations, whose season lasts the whole year, if we make an organized offer.

All papers arriving at this Symposium, and accepted upon review, should create a “nudge”, additional material which could direct the successful long-term economic development policy, both of eastern Croatia and of the whole of Croatia.

Anka Mašek Tonković, PhD.

Einführungswort

Das siebte internationale wissenschaftliche Symposium „WIRTSCHAFT OSTKROATIENS – VISION UND ENTWICKLUNG“ ist eine Plattform, die auch in diesem Jahr eminente Wissenschaftler, Doktoranden und Führungskräfte zusammenbringen wird, damit sie neue Ideen und fachliche Ratschläge für das Lösen der wesentlichen wirtschaftlichen Herausforderungen vortragen.
Das wissenschaftliche Symposium findet zum Zeitpunkt einer möglichen Wende (englischsprachig: *turningpoint*), zu dem es Hinweise auf einen sichtbaren Fortschritt und eine positive Wende in der Wirtschaftsentwicklung gibt, statt. Einzelne Firmen erhalten Auszeichnungen und Anerkennungen für ihre erfolgreiche Arbeit und Entwicklung; neue Unternehmer erscheinen; die Erzeugnisse der Landwirtschaft werden vermarktet; es gibt Hoffnung auf die Erhöhung der Zahl der Beschäftigten.
Aber, da man „nach dem Erzielen des Gutens nach dem Besseren streben soll“, werden wir wieder, immer und jedes Jahr von den Teilnehmern neue Analysen, neue Vorschläge und Visionen auf dem Gebiet der Anregung der Entwicklung ersuchen.
Richard Thaler, diesjähriger Nobelpreisträger für Wirtschaft, lenkt in der Verbindung zwischen den wirtschaftlichen und psychologischen Analysen, durch die indirekte Suggestion der Wahl, auf das Treffen von richtigen Entscheidungen (englischsprachig: *nudging*), die die gesamte Nation bewegen können.
Der wichtigste Aspekt seiner Arbeit ist, „dass er zeigt, dass die wirtschaftliche Akteure Menschen sind“. Da wir das Potenzial in der Form des Humankapitals haben, das Investieren in dessen Errungenschaften und kluge Spezialisierungen, mit Anwendung der modernen Technologie in der Herstellung und Verarbeitung, sollen ein leuchtender Punkt für die künftige Entwicklung sein.
Ostkroatien hat Potenziale einer mehrfachen Entwicklung, nebst Naturressourcen, der primären Herstellung, den traditionellen ökologischen Nahrungsmitteln und dem gastronomischen Angebot, den archäologischen Funden, dem Kultur-/Denkmal- und sakralen Erbe, die nicht genügend ausgenutzt sind. Die bekannten Kurorte sind für die Entwicklung des Gesundheitstourismus ideal. Die Drau, die Save und die Donau, das Kopački Ried – das einzig erhaltene, unberührte Naturreservat und ein europäischer Nationalpark können ein attraktives touristisches Angebot sein, was beim Planen der Entwicklung auszunutzen ist. Durch ein organisiertes Angebot können wir zu wünschenswerten touristischen Destinationen, deren Saison das ganze Jahr dauert, werden.
Alle Arbeiten, die dieses Symposium erreichen und nach der Rezension angenommen sein werden, sollten „nudge“, Hilfsmaterial, das das Lenken auf das Gestalten einer erfolgreichen langfristigen Politik der Wirtschaftsentwicklung, wie Ostkroatiens, so auch der gesamten Republik Kroatien, hervorrufen könnte, kreieren.

Prof. Dr. sc. Anka Mašek Tonković

前言

作为一个学术平台，第七届国际科学研讨会“克罗地亚东部经济——展望与发展”将汇集今年杰出的科学家、博士候选人和领导人，为应对重大的经济挑战提出新的想法和专家建议。本届研讨会的举办适逢经济发展的转折点——种种迹象表明，我们取得了显著的发展进程，经济状况出现了积极的转变。一些公司因其卓有成效的经营和发展而获得了嘉奖与认可，新的企业家层出不穷，农业发展觅得良机，就业增长也指日可待。

但是众所周知，“百尺竿头，更进一步”。我们仍将年复一年地钻研，希望与会嘉宾能够为经济的下一步腾飞贡献新的分析，建议与设想。

今年的诺贝尔经济学奖得主理查德·塞勒(Richard Thaler)将经济学与心理学融为一体，通过非直接的宏观分析推动了正确决策，有望为整个国家的发展做出贡献。

塞勒的学说最重要的一点莫过于“它显示了人是最重要的经济利益相关者”。我们应看到我国在人力资本方面的潜力，为他们取得的成就，智能化与专业化投资，将现代技术应用于生产和加工，这将成为一颗经济发展的明日之星。

克罗地亚东部有多种发展潜力，包括自然资源、初级生产、传统有机食品和诸多美食、考古遗址、文化遗产、纪念碑以及宗教文化遗产等等。而遗憾的是，这些迄今为止仍没有得到充分利用。著名的卫生保健度假村非常适合发展养生旅游业。德拉瓦河、萨瓦河、多瑙河以及欧洲唯一保存完好的自然保护区及国家公园柯帕基里特，都能成为独具吸引力的旅游项目，进而充实我们的发展规划。如果能提供合理有序的项目与服务，我们有望成为全年火爆的旅游目的地。

所有参加这次研讨会并讨论通过的文件都会成为一股推动力，为克罗地亚东部和整个克罗地亚长期经济发展政策的制定群策群力，添砖加瓦。

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PERFORMANCE BUDGETING IN THE FIELD OF ENVIRONMENT WITH AN EMPHASIS ON ECO TAXES: THE CASE OF SLOVENIA AND CROATIA[1]

PLANIRANJE PRORAČUNA NA TEMELJU MJERENJA OSTVARENIH REZULTATA U PODRUČJU OKOLIŠA S POSEBNIM NAGLASKOM NA EKOLOŠKE POREZE: SLUČAJ SLOVENIJE I HRVATSKE

ABSTRACT

Environmental regulation is one of the most changing in the last few years. Slovenia and Croatia as EU Member states should follow also EU regulation. During the accession process to EU Slovenia was not very successful in implementing the environmental regulation. Nevertheless eco taxes was implemented far before the accession process and they were in accordance to recommendations at EU level. The first Eco tax was introduced in 1995 and after that much more eco taxes followed. In Croatia the first Eco tax was introduced in 1994 and it was the special tax (excise duty) on petroleum products. In 2010, in accordance with the recommendations of the EU, Croatia has replaced this special tax on petroleum products with excise duties on energy products and electricity. Excise duties on energy products and electricity, in addition to petroleum products, include energy products used for heating and transport, as well as electricity.
Environmental taxes are one of the most suitable and widely used policy instruments for tackling the pollution problems. As an instrument of environmental policy, an environmental tax is a tax, the tax base of which is a physical unit (or proxy of a physical unit) of something that has a proven, specific negative impact on the environment, and which is identified as a tax in the European System of Accounts (ESA 95). These taxes have a double role. They are in fact used to alleviate the burden of other taxes and are also earmarked, in the sense that the revenues they raise are pre-committed to specific expenditure programmes and as such provide an income source for environmental protection in municipal and state budgets.

[1] This work has been fully supported by the Croatian Science Foundation under the project Tax Policy and Fiscal Consolidation (8174)

Despite the number of different eco taxes the revenues from eco taxes are low, and at EU level even decreasing. Partly this is the result of other environmental measurements that promote more environmental friendly production. The goals of environmental policy can be easily figured from budget documents, especially those connected to performance budgeting.
In the paper we will present the development of eco taxation in Slovenia and Croatia and comparison of budget performance indicators of environmental policy in both countries.

Key words: *environmental tax, performance budgeting, environmental protection, Slovenia, Croatia.*

SAŽETAK

U posljednjih nekoliko godina sve su češće promjene u području propisa o zaštiti okoliša. Slovenija i Hrvatska kao države članice EU također trebaju slijediti i primjenjivati propise EU. Tijekom procesa pristupanja Europskoj uniji Slovenija nije bila vrlo uspješna u provedbi propisa o zaštiti okoliša. Unatoč tome, ekološki porezi postojali su u poreznom sustavu Slovenije daleko prije procesa pristupanja i bili su u skladu s preporukama na razini EU. Prvi ekološki porez uveden je 1995. godine, a u razdoblju nakon toga i ostali oblici ekoloških poreza. U Hrvatskoj je 1994. godine uveden prvi ekološki porez i to poseban porez (trošarina) na naftne derivate. Hrvatska je 2010. godine, sukladno preporukama EU, zamijenila posebni porez na naftne derivate trošarinama na energente i električnu energiju. Trošarine na energente i električnu energiju, uz naftne derivate, uključuju energetske proizvode koji se koriste za grijanje i transport, kao i električnu energiju.
Ekološki porezi jedan su od najprikladnijih i najčešće korištenih instrumenata politike zaštite okoliša i rješavanja problema onečišćenja. Kao instrument politike zaštite okoliša, ekološki porez je porez čija je porezna osnovica fizička jedinica nečega što ima dokazani, specifični negativan utjecaj na okoliš i koji je identificiran kao porez u Europskom sustavu računa (ESA 95). Ovi porezi imaju dvostruku ulogu. Koriste se za ublažavanje tereta drugih poreza, te imaju određenu namjenu u smislu da se prihodi od tih poreza koriste za točno određene, specifične programe, te kao takvi čine izvor prihoda za zaštitu okoliša u državnom proračunu, kao i u proračunu lokalnih jedinica javne vlasti.
Unatoč velikom broju različitih ekoloških poreza, prihodi od ekoloških poreza su niski, a na razini EU se čak i smanjuju. Takvi trendovi su djelomično rezultat drugih mjera zaštite okoliša koji promiču ekološki prihvatljiviju proizvodnju. Ciljevi politike zaštite okoliša mogu se lako objasniti putem iz proračunskih dokumenata, posebno onih povezanih s proračunom temeljenim na mjerenju ostvarenih rezultata.
U radu će biti predstavljen razvoj ekološkog oporezivanja u Sloveniji i Hrvatskoj i pokazatelja učinka politike zaštite okoliša u obje zemlje.

Ključne riječi: *ekološki porez, proračun temeljen na rezultatima, zaštita okoliša, Slovenija, Hrvatska.*

1. Environmental regulation in the EU

European Union has set environmental policy and environmental protection as one of its top priorities areas (Keohane and Nye, 1989). The effects of climate change knows no boundaries. Therefore, dealing with environmental issues requires the cross-country international cooperation of several nation states within EU and beyond in order to be effective, because nation state on its own could not resolve environmental issues.

The European Union has accepted several environmental actions in the past decades in order to improve the environmental quality. EU directives are the main source of environmental regulations that Member States need to be transfer into national legislations. Until now, in order to adequately address environmental issues, the EU has accepted more than 200 legal acts, including more than 140 directives. Environmental policy of the EU present a joint decision-making compromise among EU Member States, however one should note this compromise is usually subordinated to the will of three powerful countries Germany, France and the United Kingdom. At large, four important EU institutions, namely: the European Commission, the Parliament, the Court, and the Council, along with several other public policy actors (NGOs, Business Associations, ect.) have to come to consensus about different environmental policy issues within and among themselves.

Every Member State may have to follow the rule of environmental law in the EU and is obliged to transfer it into national legislation. However, Member States still reserve the right to raise voice in some cases, namely (Weale, 2005, 132):

- the possibility to exercise their veto power in area of special concern;
- the pattern of agenda-setting at EU level that owes much to national preferences;
- persistence of national norm-setting and policy-making;
- the role of national economic interests in the conduct of environmental policy.

However, the supranational policy approach of the whole EU in terms of state collaboration ought to be followed to acquire the most beneficial effects in the environment, and not only individualistic agendas of the Member States. Over the past decades, the European Union has put in place a broad range of environmental legislation. European Union's environmental protection policies has been a subject of several action plans that arise from EU legislation and are orientated towards preventive actions. The current 7th Environment Action Programme (EAP) that entered into force in 2014 is now guiding European environment policy (EC, 2018). It addresses the environmental challenges and provides a strategic framework for the Commission's environmental policy up to 2020. It sets out the framework for environmental policy-making in the EU and includes several areas, namely: waste prevention and recycling, natural resources, marine environment, air pollution, pesticides, urban environment, and soil. Especially due to the effects of the previous EAPs, and as their result air, water and soil pollution has significantly been reduced. The 7th Environment Action Programme (EAP) determine three key objectives, namely:

- to protect, conserve and enhance the Union’s natural capital;
- to turn the Union into a resource-efficient, green, and competitive low-carbon economy;
- and to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing.

The 7th EAP defines two additional horizontal priority objectives complete the programme, namely: to make the Union's cities more sustainable, and to help the Union address international environmental and climate challenges more effectively.

The environmental policy within the 7th EAP also categorize the four so called "enablers" that will help Europe deliver on these goals: better implementation of legislation, better information by improving the knowledge base, more and wiser investment for environment and climate policy, and full integration of environmental requirements and considerations into other policies.

2. Environmental regulations in Slovenia and Croatia

Slovenia and Croatia are both aware of the significance of reaching the desired environmental policy objectives of the EU, especially when it comes to effectiveness and efficiency use of energy and increasing the energy share from renewable resources. The latter extremely important in the view of reaching European 20-20-20 targets, because it present an enormous potential for, e.g. reducing the ambient pollution and for contribution to the decrease of global warming due to greenhouse gas emissions (CO_2 equivalents). In this way countries may give their share to increased economic competitiveness, greater energy security, higher level of employment and subsequently higher regional development.

Slovenia and Croatia as EU Member States are constantly harmonizing their legislation with European environmental regulations that has been constantly changing in the last few year. During the accession process to EU Slovenia was not very successful in implementing the environmental regulation. Nevertheless, eco taxes were implemented far before the accession process and they were in accordance to recommendations at EU level. The first Eco tax was introduced in 1995 and after that much more eco taxes followed. In Croatia the first Eco tax was introduced in 1994 and it was the special tax (excise duty) on petroleum products. In 2010, in accordance with the recommendations of the EU, Croatia has replaced this special tax on petroleum products with excise duties on energy products and electricity. Excise duties on energy products and electricity, in addition to petroleum products, include energy products used for heating and transport, as well as electricity.

Surprisingly, in Slovenia privately owned enterprises, particularly small-size companies, lack an adequate knowledge about regulation in the field of environment. On the other hand, medium and large enterprises are stated not to have these problems since they are not under-staffed. Especially non problematic are national companies who do business abroad like companies Krka, Donit, Revoz Litostroj Power, Sava or Gorenje. Simmilar situation was also found to be true for Croatia small- and medium-sized companies.

Apart from that, some other issues concerning deficient implementation of existing environmental regulations remains, e.g. lack of inspections or inadequate execution of inspector supervisions, lack of execution of sanction programs, disperse instead of an uniform place of adequate environmental indicators, lack of adequate environmental objectives, nonexistence of adequate environmental indicators, and target values.

3. Environmental taxes

Environmental taxes are one of the most suitable and widely used policy instruments for tackling the pollution problems. As an instrument of environmental policy, an environmental tax is a tax, the tax base of which is a physical unit (or proxy of a physical unit) of something that has a proven, specific negative impact on the environment, and which is identified as a tax in the European System of Accounts (ESA 95). Environmental taxes have three key functions: internalisation of external costs (e.g. optimal tax rate should correspond to overall social marginal costs of pollution), financial (all taxes are usually financially generous, and collected funds could serve in environment protection), and educational (serve to encourage potential pollutants). Environmental taxes in this context have undoubtedly a double role. They are in fact used to alleviate the burden of other taxes, and are also earmarked, in the sense that the revenues they raise are pre-committed to specific expenditure programmes and as such provide an income source for environmental protection in municipal and state budgets.

In general, environemntal taxes consist of four types of taxes: energy taxes, pollutions taxes, resource taxes, and transport taxes. The distribution of environmental tax revenues for both countries for 2016 is demonstrated in Table 1.

Table 1 *Environmental tax revenues distribution in Slovenia and Croatia in 2016 (as % of total revenues from environmental taxes and social contributions)*

Country	Slovenia	Croatia
Energy taxes	8.89	7.00
Pollution taxes	0.19	0.00
Resource taxes	0.21	0.04
Transport taxes	1.19	2.24
Total environmental taxes	10.48	9.28

Source: calculations of authors

In comparison with other EU-Members Slovenia and Croatia have relatively high revenue from environmental taxes than most of other Members, which is partly due to higher energy use. At the end of 2018, the budget revenue from these environmental taxes amounted to 3.87 % of GDP in Slovenia, and 3.51 % GDP for Croatia, while the EU average was 2.44 % of GDP.

In Slovenia environmental regulations consists of 17 legal acts (MOP, 2018). The most important for environmental protection among them is the Environmental Protection Act (EPA). Slovenia adapted the EPA in 199, in compliance with EU guidelines and directives. The EPA consists of essential environmental protection measures and principles, environmental condition monitoring and information about environment, economic and financial instruments of environmental protection, environmental protection public services and other issues related to environmental protection. In Slovenia, the main goal of the EPA is to direct and to accelerate such kind of social development that allows long-term conditions for well-being, general quality of life, human health, and preservation of biodiversity. In Slovenia, environmental protection goals may be stimulated and promoted with several financial and economic mechanisms, namely:

- environmental taxes;
- by means of the budget;
- trade with emission allowances;
- management of the »Kyoto units« and emission allowances;
- deposits and other forms of securities;
- insurances, bank guarantees and other forms of financial security;
- joint investments in projects to reduce environmental burden;
- loans with favorable interest rate, business capital investments, guarantees or other forms of securites;
- and subsidies or other forms of grants that contribute to environmental protection.

Under Environmental Protection Act Slovenia adopted nine environmental taxes. All of them are administered by Financial Administration of the Republic of Slovenia. These taxes are consists of taxes on:

- the pollution of air with carbon dioxide emissions (CO_2 tax),
- the use of lubricating oils and fluids;
- landfilling with scrap motor vehicles;
- landfilling with scrap pneumatic tires;
- landfilling with scrap packaging;
- landfilling with waste electrical and electronic equipment;
- environmental pollution due to the use of volatile organic compounds;
- environmental pollution caused by waste water discharge;
- environmental pollution caused by waste disposal.

In Croatia environmental regulations consists of 19 legal acts. The most important environmental regulation act is the Law on Environmental Protection. This law establishes the principles of environment protection in Croatia, provides a framework for further regulation with respect to environment protection and makes provision for the implementation of environment protection policies and plans and the administration of the environment.

Under the Law of Environmental Protection Croatia adopted eight basic types of environmental taxes and charges, namely:

- special motor vehicle tax;
- excise duty on electricity;
- excise duty on natural gas;
- excise duty on solid fuels;
- charges for environment pollutants;
- charges for the environment users;
- charges for environmental impact of waste;
- and special environmental charge for motor vehicles.

Despite the number of different eco taxes the revenues from eco taxes are low, and at EU level even decreasing. Partly this is the result of other environmental measurements that promote more environmental friendly production. The goals of environmental policy can be easily figured from budget documents, especially those connected to performance budgeting. In the following chapter we present performance budgeting and example of the performance indicators for environmental policy in Slovenia.

4. Performance budgeting and environmental policy

Performance budgeting is the latest trend in attempts to improve government performance. It is a promising tool for improving governance and accountability of public finance expenditures (Osborne 2007). Within this budget concept, the main focus is not on resources *per se* but also on results and impacts. In other words, performance budgeting aims to improve the efficiency and effectiveness of public expenditure by linking the funding of public sector organizations to the results they deliver. Improving and measuring performance in the field of environmental protection and pollution has pre-occupied governments for at least half a century.

Performance budgeting is a tool that holds promise for improving the governance and accountability of public finance expenditures. This new budget concept connects the findings of performance measurement to budget allocations and investigates the connection among spent public appropriations and planned public objectives. Performance budgeting is important for studying environmental issues because environmental taxes are one of the few taxes that are collected in order to be spent and reinvested in the environment.

Slovenian budget in 2018 is a program budget that is divided in 24 policy spending areas or programs, environmental protection and environmental infrastructure as 15^{th} public policy being one of them. By building an appropriate environmental local public infrastructure, the goal of 15^{th} public policy program is to provide a healthy living environment for the inhabitants. In the area of environmental protection, strategically important long-term policies and goals are aimed at prevention or the reduction of consequences on areas that pose a threat to sustainable development.

The explanatory statement of the adopted budget for of 15^{th} public policy, i.e. environmental protection and environmental infrastructure divides this policy programs, subprograms, proponents of financial plans contributing to policy implementation, priority axis, general and specific policy objectives, related environmental indicators and achieved results for each of the categories. 15^{th} public policy is defined on 18 pages and consists of six programs that are further divided in 13 subprograms and together contains 97 indicators. The example of the budget section from this public policy is presented below and in Table 2.

Policy: 15 - ENVIRONMENTAL PROTECTION AND ENVIRONMENTAL INFRASTRUCTURE

Proponents of financial plans contributing to policy implementation:
1541 - Government Office for Development and European Cohesion Policy
2550 - Ministry of the Environment and Spatial Planning

General objectives and their indicators for the period 01.01.2017 - 31.12.2018
C7032 - Priority axis 6: Better state of the environment and biodiversity
C1841 - Achieving good status in the environment and nature and reducing the impact of climate change impacts and increasing the safety of the population

Table 2 *Example of presentation of indicators connected to proponents of financial plans and general objective C7032 and C1841*

ID	Indicator	Source	Measuring unit	Base year	Base value	Year	Achived value	Reference value	Target value
I04019	Measuring locations in Slovenia, where no. days with exceeded daily limit concentration O_3 greater than 25	ARSO, Eurostat	%	2008	80.00	2011	75.00		
						2014	33.00	50.00	50.00
						2015	0.00	50.00	50.00
						2017	0.00		60.00
						2018	0.00		60.00
I04020	Measuring locations in Slovenia, where no. days with exceeded daily PM10 concentration limit greater than 35	ARSO, Eurostat	%	2008	67.00	2011	79.00		
						2014	13.00	0.00	0.00
						2015	0.00	0.00	0.00
						2017	0.00		65.00
						2018	0.00		65.00
I08352	Fulfillment of greenhouse gas emission reduction commitments gas (GHG) under EU legislation		equivalents CO2	2013	12278.00	2016	0.00	12.371,00	12371,00
						2017	0.00	12.401,00	12359285.00
						2018	0.00	12.432,00	12390747.00
						2019	0.00	12.462,00	12422210.00
						2020	0.00	12.493,00	12453673.00

Source: calculations of authors

In Croatia, according to our knowledge, budget is not divided into policy spending areas, as it is the case in Slovenia, but rather according to the established major 43 budget spenders, where Ministry of environment and energy being one of them. The explanation of the budget for this ministry consists of 86 pages alone, where Croatian budget for 2018 in total is presented on 1437 pages. The example of the budget section from Ministry of environment and energy is presented below and in Table 3.

077 MINISTRY OF ENIVONMENT AND ENERGY
3401 ENVIRONMENTAL PROTECTION
A784047 IMPLEMENTATION OF THE EUROPEAN UNION STRATEGY FOR THE DANUBE REGION, SUPPORT TO PRIORITY AREA 6
3402 Environmental protection
Objective 1. Improve prerequisites to prevent all types of environmental pollution
Objective 2. Provide prerequisites for mitigation and adaptation to climate change and the protection of the ozone layer

Table 3 *Performance indicators for environmental protection connected to objective 1 and 2*

Performance indicators	Definition	Measuring unit	Base value	Source	Target value (2018)	Target value (2019)	Target value (2020)
Implementation of the Air Protection Plan	Implementation of measures defined by the Plan	%	50	MZOE	70	80	90
Maintaining the continuity of the implemented procedures of strategic environmental impact assessment	Evaluation and strategic assessment procedures carried out	%	70	Strategic plan MZOE	75	80	85

Source: calculations of authors

5. Conclusion

This paper gave an outline of environmental regulation in the European Union, where special focus was on environmental regulations in Slovenia and Croatia. We demonstrate the connection between performance budgeting and environmental protection policy.
In the last two decade EU countries with high level of fiscal accountability have followed recommendations of international organizations to implement the concept of performance budgeting. The key element of performance budgeting is results orientated budget, in comparison to traditional budget which is strictly focused on resources. The result-based budget is based on programs and defined performance indicators that generate the information needed to evaluate the effects of its implementation.

Insufficient focus on defining the goals, target values and indicators with which we measure the progress within individual public sector program or subprogram may be found as possibly the main reason for the failure to concretize theoretical framework in measuring performance and efficiency in Slovenia and Croatia. What means that the concretization of performance budgeting in environmental perspective is not yet adequately achieved. The analysis of budget documents for environmental policy for Slovenia and Croatia showed that objectives of the environmental public sector are very diverse and also often very difficult to be identified. Especially in case of Croatia, it would be more appropriate, that the budget is primarily structured in accordance with individual budget spending policy areas, as is the case in Slovenia. Both countries also lack adequate environmental objectives, corresponding indicators and target values in some programs and subprograms. For this reason, care should be taken when determining the objectives of programs, indicators and their target values. At the same time, one should be aware that there are differences between the expressed desired state and the actual situation. Adequate indicators may help to determine the differences among the actual and the desired situation and demonstrate the decrease or increase of the trend. Establishment of performance budgeting may help public policy planners to create a manageable and more transparent budget. Defining programs, subprograms, objectives, related proponents of objectives, targets and target values offers could allow tractability of budgetary public appropriations' spending.

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