

LOCAL Policies for GREEN Energy – LOCAL4GREEN

Priority Axis 2: Fostering low-carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas Specific Objective 2.2: To increase the share of renewable local energy sources in energy mix strategies and plans in specific MED territories

NATIONAL HANDBOOK SLOVENIA

Project Partner in charge: Building and Civil Engineering Institute ZRMK Project partners involved: -

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1 INTRODUCTION

The project LOCAL4GREEN from the Interreg MED programme supports local authorities to define and implement innovative local fiscal policies intended to promote renewable energy sources (RES) in all sectors (public, private, and households), mainly in the framework of the SEAPs (Sustainable Energy Action Plans submitted under the 2020 Covenant) and SECAPs (Sustainable Energy and Climate Action Plans to be submitted under the 2030 Covenant) adopted by the signatories of the Covenant of Mayors. The project is being implemented in the rural zones and islands of the MED region, where local fiscal policies play a crucial role in order to raise the share of renewable energy sources.

The project has been implementing pilot experience in selected local authorities of 9 countries/regions of the MED area: Spain (the project lead partner), Albania, Croatia, Cyprus, Greece, Italy, Malta, Portugal, and Slovenia.

In Slovenia, pilot municipalities participating in project activities are Grosuplje, Ivančna Gorica, Kamnik, Kočevje, Kranj, Križevci, Lenart and Trebnje. Associated partners are Local Energy Agency of Gorenjska (LEAG), and Municipalities of Kamnik and Kočevje.

				***				leag o
Grosuplje	lvančna Gorica	Kamnik	Kočevje	Kranj	Križevci	Lenart	Trebnje	LEAG

The objectives of this national handbook on green local fiscal policy models are to:

- outline policy models transferrable at the national level, based on the experiences of the pilots' and on best practices,
- provide Slovenian decision makers with all information (legal, economical, technical, etc.) needed to implement the green local fiscal policy models in other municipalities,
- provide the project with best practices on green local fiscal policies to be included in an international handbook and be transferred at the international level.

In this context, the main emphasis of the handbook lies upon:

- description of the Slovenian regulations regarding the local fiscal policies and the capacity of the local authorities to put in place fiscal policies to promote RES,
- description of the pilot local fiscal policies considered as best practices,
- description of the Slovenian legislative and normative reforms needed to enable the local authorities to put in place improved fiscal policies to promote RES.

The main sources of information for the elaboration of the national handbook are the evaluation reports of the pilot fiscal policies, available as separate documents.

The main target groups of the both the national and international handbook are:

- local authorities' employees and decision makers,
- consultants specialized in public management,
- national and regional authorities' decision makers,
- other stakeholders interested in advocacy for renewable energy sources in local authorities.

Experience from pilot activities will be used for dissemination and application in other local authorities in Slovenia.

2 NATIONAL REGULATIONS ON LOCAL FISCAL POLICIES AND LOCAL FISCAL CAPACITY

Local autonomy is a highly valued feature of any system of local government, however there is no agreed upon definition of local autonomy (Clark 1984, Page and Goldsmith 1987, Vetter 2007, Wolman 2008)¹ and the literature is not very specific when it comes to operationalising the various aspects of local autonomy. Clark (1984)² suggests **four ideal types of autonomy**.

Under **Type 1** autonomy local authorities have both the powers of initiative and immunity from higher levels of government. **Type 4** autonomy on the contrary, characterises local authorities which are administrative arms of higher tiers of the state in the sense that they hold no power of initiative and are subject to strong control. **Type 2** autonomy can be described as decentralised liberalism. It allows local authorities to act in their own interest, but makes their decisions subject to control by higher levels of government. Finally, **Type 3** autonomy also is a limited type of autonomy in the sense that local authorities enjoy no powers of local initiation but have no fear of higher tiers of the state because of their immunity. Since the power of initiative is crucial, according to Clark, this latter type holds less autonomy than Type 2.

To identify how Type 2 autonomy can be used analytically, Goldsmith (1995)³ summarises the limits imposed on local government by higher levels of government under five headings. First, local government autonomy depends on the legal framwork. Second, the range of functions delegated by higher levels of government has to be taken into account. The third factor stresses the fact that the more tasks a local government is responsible for, the higher its autonomy and this. The fourth heading expresses the idea that **functions cannot be performed without financial resources. Here, it is the financial competences that are relevant (e.g. the ability of the local government to set its own tax rates)**. Finally, the degree of influence which local government is able to exert over higher levels of government is also an important factor. This political influence expresses itself through both an indirect and a direct access to national decision-making.

Other authors emphasise the **importance of financial resources for local authorities to be truly autonomous.** Albeit important, **tax raising powers** do not capture full aspects of local government autonomy. **Fiscal autonomy can be seen as a basic element of local autonomy** even if the **European Charter of Local Self-Government** does not go very far in its specification of local rights when stating in its article 9.3: "*Part at least of the financial resources of local authorities shall derive from local taxes and charges of which, within limits of statue, they have*

¹ Clark, G. L. 1984. A Theory of Local Autonomy. In: Annals of the Association of American Geographers, 74 (2), 195-208.

Page, E. and Goldsmith, M. 1987. Central and Local government Relations. London: Sage.

Vetter, A. 2007.Local Politics: a resource for democracy in Western Europe? Local autonomy, local integrative capacity, and citizens' attitudes towards politics. Lexington Books.

Wolman, H. 2008. Comparing local government systems across countries: conceptual and methodological challenges to building a field of comparative local government studies. In: Environment and Planning C: Government and Policy 26, 87-103.

² Clark, G. L. 1984. A Theory of Local Autonomy. In: Annals of the Association of American Geographers, 74 (2), 195-208.

³ Goldsmith, M. 1995. Autonomy and City Limits. In: JUDGE, David, STOCKER, Gerry and WOLMAN, Harold (eds.). Theories of Urban Politics. London: Sage, 228-252.

the power to determine the rate". Fiscal autonomy is measured by the extent to which local government can independently tax its population. Based on the the latest research on the local fiscal autonomy – Local Autonomy Index (Ladner, Keuffer and Baldersheim, 2015) **Slovenia scored very low on Fiscal autonomy**. In Slovenia municipalities can, according to the Constitution Article 146 and 147 independently tax its population, however they cannot impose taxes that are under authority of other governmental level and they cannot impose tax on the area that already has some sort of taxation. Additionally independent taxation is (according to the Financing of municipalities Act, Article 6) limited to Property tax (Law on Real Estate was not adopted jet, so until then tax on Compensation for the use of building land is in place), tax on vessels, tax on real estate transactions, inheritance and gift taxes, tax on winnings from conventional games of chance and other taxes stipulated by law. Due to legislative limitations only tax on Compensation for the use of building land is independently set by local authorities.⁴

The above mentioned report also ranked countries for local self-reliance, which represents the proportion of local government revenues derived from own or local sources (taxes, fees, charges without transfers and subsidies). It is usually argued that **the more important the municipalities' own resources are for financing their budgets, the higher is their degree of autonomy. Slovenia** ranks the lowest among the countries in the study, as there is under 10% of own resources, thus local government hardly has any own revenues. So in comparison to other countries local governments in Slovenia are severely limited in adopting and implementing fiscal policies.⁵ However there are some sources that can be (semi)autonomously set and then utilized to promote renewable energy sources.

As laid down in Article 53 of the **Local Self-Government Act**,⁶ municipalities are entitled to the following revenues for the purposes of financing local affairs of public significance:

- 1. property tax,
- 2. inheritance tax and gifts,
- 3. tax on prizes from games of chance,
- 4. tax on real property transactions,
- 5. other taxes as specified by the law.

⁴ Aside this tax also non-tax revenue from dues is fully within local government authority, thus the revenue stemming from these is a true indicator of financial autonomy of Slovene local governments.

⁵ The financial resources of municipalities are stipulated in the 142th Article of the Constitution, which states that "A municipality is financed from its own sources. Municipalities that are unable to completely provide for the performance of their duties due to insufficient economic development are assured additional funding by the state in accordance with principles and criteria provided by law." Additionally Constitution states in the first paragraph of the 146th Article that "local communities raise funds for the performance of their duties by means of taxes and other compulsory charges as well as from revenues from their own assets," and further, in the second paragraph of the 147th Article, that "local communities impose taxes and charges under conditions provided by the Constitution and law." However, central government never waived its fiscal sovereignty in the past two decades. ⁶ Official Gazette RS, no. 94/07, 76/08, 79/09, 51/10, 40/12 – ZUJF, 14/15 – ZUUJFO and 76/16 – decision of the Constitutional Court.

Article 6 of the **Financing of Municipalities Act** stipulates that the sources of financing municipalities are municipal budget revenues deriving from:

Municipal own tax sources:⁷

- property tax;
- vessel tax;
- tax on real estate transactions;
- inheritance and gift tax;
- tax on winnings from conventional games of chance and
- any other tax where so provided by the Act governing taxes.

Municipal own non-tax (other) sources:

- imposed contributions,
- fees (dues),
- fines,
- concession fees,
- payments for local public services, etc.,⁸
- (environmental taxes)⁹

As already presented, Slovenia scores low on Local autonomy Index regarding the fiscal autonomy. However for the purpose of this report it is important to understand **how much**,

⁷ Financing of Municipalities Act (article 6) stipulates that own tax resource includes 54% of personal income tax. However this tax is defined and collected by national government and is under international classification not defined as own tax resource.

⁸ If so provided by the Act governing individual fees or by a regulation issued on its basis (Financing of Municipalities Act, article 7).

⁹ Environmental taxes prescribed on the basis of the act governing environmental protection for burdening of the environment with wastewaters and disposal of waste to landfill sites, which are considered infrastructure intended for mandatory municipal public services in the field of environmental protection, shall constitute budget revenue of the municipality in which the taxable environmental burden was incurred. The ordinance adopting the municipality's budget shall provide that environmental tax revenue may only be used for:

^{1.}construction of infrastructure intended for the performance of mandatory municipal public services in the field of environmental protection in accordance with national operational programmes adopted by regulations governing environmental protection in the field of wastewater discharge, solid-waste management and disposing of waste, and 2.provision of supply standards, technical, maintenance, organisational and other measures, prescribed for performance of mandatory municipal public services in the field of environmental protection.

⁽⁴⁾ The municipality's revenues shall also include its tangible and financial assets, grants and transferred revenues received from the national budget and EU funds.

even If very little, fiscal autonomy municipalities have. Their ability to adapt own fiscal policy to gain more revenue (and/or reallocate it to RES) can be understood as **municipal fiscal capacity.** There is an ongoing debate on how much autonomy Slovene municipalities have. This stems from Constitutional formulation of the Article 140. that reads:

The competencies of a municipality comprise local affairs which may be regulated by the municipality autonomously and which affect only the residents of the municipality.

By law, the state may transfer to municipalities the performance of specific duties within the state competence if it also provides the financial resources to enable such.

State authorities shall supervise the proper and competent performance of work relating to matters vested in local community authorities by the state.

Same analogy goes for **financial autonomy**. As already mentioned, according to the Constitution Article 146 and 147¹⁰ municipalities can independently tax its population. Article 146 reads:

The state and local communities raise funds for the performance of their duties by means of taxes and other compulsory charges as well as from revenues from their own assets. The state and local communities disclose the value of their assets by means of balance sheets.

And, what is more important Article 147 states:

The state imposes taxes, customs duties, and other charges by law. Local communities impose taxes and other charges under conditions provided by the Constitution and law.

Although municipalities can undertake tasks that are not under other government authority and/or can implement new tax or non-tax measure that is not already implemented by legislation (not the specific tax, but the area of taxation), this almost never happened. The reason for this is that overregulation resulted in very few (If any) areas that are not already regulated. So in theory municipality could set a completely new tax, but it should argument that on this taxation area there is no similar tax and that this area is so locally specific, that local tax is in order.

But, can a municipality modify tax or non-tax obligation to some extent? There are few areas that **municipality can modify** (see Table 1).

type of revenue	legal framework	level of taxation	can municipality modify taxation
Income tax –	Personal Income Tax Act (Official	tax brackets are	no
municipal share	Gazette RS, no. 13/11, 9/12 –	predefined	

Table 1: Municipal taxes and non-taxes according to the possibility of modification

¹⁰ The state imposes taxes, customs duties, and other charges by law. Local communities impose taxes and other charges under conditions provided by the Constitution and law.

Real estate property tax Property tax for leisure and recreation facilities	decision of Constitutional Court, 24/12, 30/12, 40/12 – ZUJF, 75/12, 94/12, 52/13, 50/14, 23/15, 55/15, 63/16 in 69/17) Civil Tax Act (Official Gazette RS, no. 36/88, 8/89, Official Gazette RS, no. 48/90, 8/91, 14/92 – ZOMZO, 7/93, 18/96 – ZDavP, 91/98 – ZDavP-C, 1/99 – ZNIDC, 117/06 – ZDVP, 117/06 – ZDDD, 24/08 – ZDDKIS and 101/13 – ZDavNepr)	Government adopts Rules on the indexation of tax assessment amounts pursuant to the Civil Tax Act on yearly bases, where tax brackets are defined	no
Compensation for the use of building land ¹¹	Spatial Management Act (Official Gazette RS, no. 110/02, 8/03, 58/03 – ZZK-1, 33/07 – ZPNačrt, 108/09 – ZGO-1C, 80/10 – ZUPUDPP and 61/17 – ZUreP-2), Law on use of building land (Official Gazette of Socialistic RS, no. 33/89)	depends on the individual municipality	yes (with some minor limitations)
Vessel tax	Act on the Taxation of Water Vessels (Official Gazette RS, no. 117/2006, 40/2012 - ZUJF	Depends on the size and other characteristics of the vessel	no
Inheritance and gift tax	Inheritance and Gift Taxation Act(Official Gazette RS, no. 117/2006, 36/2016 – decision of Constitutional Court)	tax brackets define the level of tax	no
Tax on real estate transactions - from legal entities Tax on real estate transactions - from natural persons	Real Property Transaction Tax Act (Official Gazette RS, no. 117/06, 25/16 – decision of Constitutional Court).	2% of the value of the real estate	no
Tax on prizes from games of chance	Taxation Act on Prizes from the Classical Games of Chance (Official Gazette RS, no. 24/08)	15 % of winnings	no
Tax for environmental pollution due to the discharge of waste water	Decree on the environmental tax on pollution due to the waste water discharge (Official Gazette RS, no. 80/12 and 98/15)	depends on the type of activity and pollution	no
Tourist tax	Promotion of Tourism Development Act (Official Gazette RS, no. 2/04,	varies according to categories and	yes (but with some

¹¹ This compensation is still in use due to Constitutional court decision that the new Real estate tax is unconstitutional.

(earmarked!)	57/12, 17/15, 52/16 – ZPPreb-1 and	exceptions +	limitations) ¹²
Municipal fees from legal entities Municipal fees from natural persons	29/17 – ZŠpo-1) Municipal financing Act (Official Gazette RS, no. 123/06, 57/08, 36/11 and 14/15 – ZUUJFO)	 municipal decision A municipality may impose municipal fees for the following purposes: advertising, organisation of exhibitions and events, parking and other activities which differ from their planned use and represent specific use laid down by municipal ordinance of: -municipality-owned areas of public use such as public roads, streets, squares, marketplaces, playgrounds, car parks, cemeteries, parks, greens, recreational premises and similar, -fixed and movable infrastructure intended for municipal public services, 	yes ¹³
		-municipality-owned buildings, and	
		-for other matters	
Fees for maintenance of forest roads	Decree on fee for maintenance of forest roads (Official Gazette RS, no. 38/94, 20/95, 42/98, 12/99, 25/02, 35/03, 31/05, 9/06, 32/07, 36/09, 103/10, 35/12, 101/13 – ZDavNepr	depends on type of vehicle, purpose of transportation etc.	no

¹² Municipal Council adopts decree on Tourist tax (article 24., 25., 26. and 27. Promotion of Tourism Development Act).

¹³ Municipal Council adopts decree on Municipal fee (Municipal financing Act (Official Gazette RS, no. 123/06, 57/08, 36/11 and 14/15 – ZUUJFO /article 9). Municipal administration calculates municipal fee for individual user according to the Law and municipal decree.

	and 42/15)		
Administrative fees for documents Administrative taxes in the field of transport and communications Fines in administrative procedures	Administrative Fees Act (Official Gazette RS, no. 106/10, 14/15 – ZUUJFO, 84/15 – ZZeIP-J and 32/16)	depends	no
Revenues from communal contributions (has to be earmarked!)	Spatial Planning Act ¹⁴ (Official Gazette RS, no. 33/07, 70/08 – ZVO- 1B, 108/09, 80/10 – ZUPUDPP, 43/11 – ZKZ-C, 57/12, 57/12 – ZUPUDPP-A, 109/12, 76/14 – decision of Constitutional Court, 14/15 – ZUUJFO in 61/17 – ZUreP-2) Rules on the criteria for the assessment of building land development fee (Official Gazzete RS, no. 95/07 and 61/17 – ZUreP-2)	depends on type of land and other factors	yes to some extent ¹⁵
Compensation for degradation and usurpation of space	Construction Act (Official Gazette RS, no. 102/04, 14/05 – 92/05 – ZJC-B, 93/05 – ZVMS, 111/05 – decision of Constitutional Court, 126/07, 108/09, 61/10 – ZRud-1, 20/11 – decision of Constitutional Court, 57/12, 101/13 – ZDavNepr, 110/13, 19/15, 61/17 – GZ and 66/17 – decision of Constitutional Court) Decree on the criteria for calculating the amount of compensation for environmental degradation and usurpation of land and on the method of payment thereof (Official Gazette RS, no. 33/03, 79/09, 6/14 and 61/17 – GZ)	Depends on type and land of	no
Environmental	Environmental Protection Act	depends on the type	no

 ¹⁴ Specifically article 82.
 ¹⁵ Municipal Council adopts decree on Communal contributions in the municipality. Municipal administration calculates communal contribution for individual user according to the Rules and municipal decree.

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levy on pollution	(Official Gazette RS, no. 39/06 –	and amount of waste	
caused by the	49/06 – ZMetD, 66/06 – decision of		
disposal of waste	Constitutional Court, 33/07 –		
	ZPNačrt, 57⁄08 – ZFO-1A, 70/08,		
(earmarked!)	108/09, 108/09 – ZPNačrt-A, 48/12,		
	57/12, 92/13, 56/15, 102/15, 30/16		
	and 61/17 – GZ)		
	Decree on the environmental tax on		
	pollution from the landfilling of		
	waste		
	(Official Gazette RS, no. 14/14)		

There are two revenues that are closely linked to the area of protecting environment and sustainable development:

- **Tax for environmental pollution due to the discharge of waste water** (is 100% municipal revenue, however municipality is not allowed to modify taxation)
- Environmental levy on pollution caused by the disposal of waste (84% of this tax revenue goes to the municipality, municipality is not allowed to modify taxation)

Both financial instruments are **earmarked** by Municipal Financing Act (Article 7, paragraph 3) that states:

Environmental taxes prescribed on the basis of the act governing environmental protection for burdening of the environment with wastewaters and disposal of waste to landfill sites, which are considered infrastructure intended for mandatory municipal public services in the field of environmental protection, shall constitute budget revenue of the municipality in which the taxable environmental burden was incurred. The ordinance adopting the municipality's budget shall provide that environmental tax revenue **may only be used for**:

1. construction of infrastructure intended for the performance of mandatory municipal public services in the field of environmental protection in accordance with national operational programmes adopted by regulations governing environmental protection in the field of wastewater discharge, solid-waste management and disposing of waste, and

2. provision of supply standards, technical, maintenance, organisational and other measures, prescribed for performance of mandatory municipal public services in the field of environmental protection.

It falls within the authority of **Municipal Council** to **adopt a decree** in which purpose for reallocated sources from these two revenue brackets will go to. Bot mechanisms fall well within RES promotion policy.

Additionally, there are **two fiscal mechanisms**¹⁶ that are enabling local governments to gain revenue for RES promotion as they more **flexible** regarding municipal modification of the taxation and regarding how revenue from them is spent, these are:

- Compensation for the use of building land,
- Municipal fees (possibly, depends on the content of the taxation area).

Compensation for the use of building land is most commonly cited as a mayor own municipal tax and it is second biggest tax revenue for municipalities. There is an elaborate legal blueprint how it is determined and it mostly takes into consideration type of infrastructure in the area, the purpose of the activities in the buildings, ownership etc. There is an option for local government to **exempts buildings that use RES from this taxation**. However the efficiency of such activity is linked to the amount of the Compensation would be paid in the first place. So the question of exemption is inevitably linked to existing taxation on the area. Alternatively local government could increase the Compensation significantly, while exempting users of RES.

Municipal fees are in full (100%) municipal revenue. Municipal financing Act states that municipality may impose municipal fees for the following purposes:

advertising, organization of exhibitions and events, parking and other activities which differ from their planned use and represent specific use laid down by municipal ordinance of:

- municipality-owned areas of public use such as public roads, streets, squares, marketplaces, playgrounds, car parks, cemeteries, parks, greens, recreational premises and similar,

- fixed and movable infrastructure intended for municipal public services,
- municipality-owned buildings, and
- for other matters if so provided by an Act.

Municipality fees may be imposed by an ordinance that specifies the nature and amount of the fee, as well as the persons liable to pay the fee. The amount of fee should not be assessed by the value of the item, actual turnover or actual revenue. The municipality should not require payment of municipality fees for activities where it is prohibited by an Act or if another mode of payment is specified or agreed upon by contract. So, although municipal fees are flexible mechanism to gain and to reallocate revenue local authorities should be careful not to impose fee on the area where similar tax burden is already in place.

Another tax that is contextually linked to RES is **Tourist tax**, especially if municipality is promoting green tourism. **An advantage** of this tax is that municipality can to some extent **modify** it (discretion to decide if additional groups of users will be charged – e.g. real estate owners that use facilities for own leisure, overnight stays in vessels – or if some groups are

¹⁶ According to Milunovič (Milunovič, V. 2012. Sistem financiranja subnacionalnih ravni oblasti. In Bačlija I. (ed.), Lokalna demokracija IV: Aktualni problemi slovenske lokalne samouprave: 105-130. Maribor: Inštitut za lokalno samoupravo in javna naročila.) these two revenues are basically only own revenues of municipalities in Slovenia.

excluded from paying the tax – thus promoting specific types of activities). **Disadvantage** is that Promotion of Tourism Development Act **earmarks** this tax (article 20, paragraph 2) so that municipality can finance tourism promoting activities from this revenue (article 21), like informing activities, promotion activities, marketing activities, developing joint touristic infrastructure, development and maintaining of public space intended for tourism etc. Therefore if municipality gains substantial revenue from this tax **with some contextual maneuvering there is a high probability that this revenue could be used for RES promotion**.

3 DESCRIPTION OF LOCAL FISCAL POLICIES CONSIDERED AS BEST PRACTICES

All eight partner municipalities raise significantly different revenue from four abovementioned sources (four that are within municipal jurisdiction to modify). **Since Compensation for the use of building land represents the highest revenue among all four sources**, it is most efficient to modify in order to gain significant revenue needed for RES.

As an umbrella measure for all partner municipalities it should be considered **raising** the **Compensation for the use of building land where possible**. For example in Kranj, **Compensation for the use of building land** amounts to $80 \notin$ /citizen, and in Križevci only $22 \notin$ /citizen. Other sources display similarly different taxation of local community; for example Communal contribution, that amounts to approximately $36 \notin$ /citizen in Ivančna Gorica, Grosuplje and Trebnje and only to about 7 to $15 \notin$ /citizen in less developed municipalities like Lenart, Križevci and Kočevje.

These differences in collecting taxes that are within municipal authority to set, combined to data on how well municipality is developed (according to the Coefficient of municipal development¹⁷) imply that possible **fiscal policies to enhance revenue for RES should be different according to the municipal development level**.

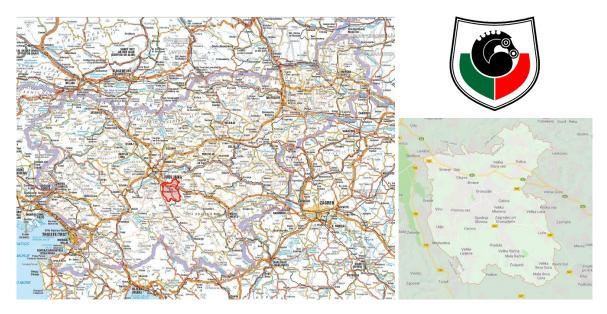
- **Positive tax discrimination** = enhancing use of RES without additional taxation for legal and natural persons in the municipality (for underdeveloped municipalities).
- **Negative tax discrimination** = taxation of those activities in the municipality that are not using RES and allocating them to subsidizing activities that use RES.

The argumentation for establishing policy guidelines according to municipal development is that subjects in developed municipalities can withstand higher taxation due to higher income level. In underdeveloped municipalities where unemployment is high and income level is low, additional taxation for promoting RES could backlash in negative public attitude towards RES. Thus RES would become a problem instead a solution, which is not in line with promoting RES in the first place. Additionally, those municipalities where subjects can withhold higher taxes, municipal government should make a strategy how to transparently and fairly reallocate these resources.

<u>NOTE</u>: Below follow descriptions of identified best practice scenarios in each pilot municipality. More detailed overview with comprehensive impact analysis can be found in separate individual evaluation reports.

¹⁷ The Coefficient of municipal development is national tool to establish which municipalities are underdeveloped. The Coefficient is based on data: gross added value per employed person, Income tax per municipal inhabitant, number of workplaces per number of working population in municipality, index of aging population, registered unemployment rate, working population in municipality, number of inhabitants with access to public sewage system, cultural objects and infrastructure, share of territory under Natura 2000, population density in the municipality.

3.1 Municipality of Grosuplje



Municipality of Grosuplje, which is part of the Osrednjeslovenska statistical region, measures 134 km²; this ranks it as the 49th among Slovene municipalities. According to the **Coefficient of municipal development** Grosuplje is above average developed municipality (Coefficient value is **1,27** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 20,180 people were living in the municipality, which ranks Grosuplje 18th among Slovene municipalities. The population density was 151 people per square kilometre, which was higher than the national average of 102 people per square kilometre. The number of live births was higher than the number of deaths, which means that natural increase per 1,000 population in the municipality was positive. It was 4.7 (in Slovenia 0.3). The number of people who moved from the municipality was lower than the number of people who moved into the municipality, so net migration per 1,000 population in the municipality was positive. It was 6.6.

The sum of natural increase and net migration per 1,000 population in the municipality was positive. It was 11.3 (in Slovenia 0.8). The mean age of people in Grosuplje was 39.8 years, which was lower than the national average (42.9). Among people aged 15–64 (i.e. working age population) about 65% were persons in employment (i.e. persons in paid employment or self-employed persons), which is more than national average (60%).

The registered unemployment rate was 9.5%, which is less than the national average (11.2%). As in most Slovene municipalities, more women than men were unemployed. In Grosuplje, average monthly gross earnings per person employed by legal persons were about 10% lower than the annual average of monthly earnings for Slovenia; and net earnings about 8% lower.

Table 2: Main data for Grosuplje

CHARACTERISTICS OF THE GROSUPLJE MUNICIPALITY (2016)	Grosuplje	Slovenia (average)
Density of population (per km ²)	151	102
Total increase (per 1,000 population)	11	1
Mean age of population (years)	40	43
Registered unemployment rate (%)	10	11
Natural increase (per 1,000 population)	5	
Net migration (per 1,000 population)	7	1
Ageing index	83	125
Average monthly gross earnings (index, SI=100)	90	100
Average monthly net earnings (index, SI=100)	92	100
Employment/population ratio (%)	65	60
Number of passenger cars (per 100 population)	52	53
Municipal waste collected (kg/person)	313	347
Area km2	134	20,273
Population	20,181	2,064,241
Number of persons in paid employment	6,552	824,485
Average monthly net earnings per person in paid employment (EUR)	943	1,030
Turnover of enterprises (1,000 EUR)	646,853	98,573,630
Number of registered unemployed persons	911	103,152
Average monthly gross earnings per person in paid employment (EUR)	1,428	1,585
Number of enterprises	1,875	196,072
Number of passenger cars	10,605	1,096,523
Municipal waste collected (ton)	6,323	715,826

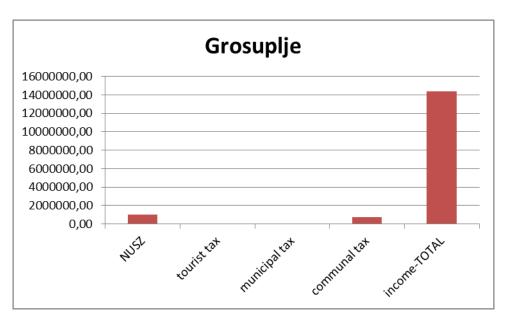
Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Grosuplje municipality on average collected almost most revenue among partner municipalities (exception being Kranj) (see Graph 1). Notably two important taxes, municipal tax and communal contribution were well above average, meaning that fiscal policy overall is well balanced.

However, relative to total income of the municipality in 2016 both revenues are minor. Regarding high employment in the municipality and high score on the Municipal development Index increase of both revenues should be reconsidered.

Although Grosuplje municipality is more developed than average Slovene municipality, its Compensation for the use of building land is set lower than on average in other Slovene municipalities. Thus municipal government could raise this taxation for 20 \notin /citizen, which amounts to 380.000 \notin in one year. This additional revenue could be then used for promoting RES.



Graph 1: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

a. There is a significant daily migration from Grosuplje to Ljubljana, meaning that Grosuplje could especially promote **RES in mobility**. The municipal government could establish a P+R (park and ride) system that would promote public transport for daily migrations with train (since June 2019 there is a daily connection Kočevje-Ljubljana that passes through Grosuplje).

The municipal government should offer free parking spaces near train station and/or public bicycles renting with five stations throughout municipality and linked to train station. Investment for five bicycle rent stations is 140.000 €. 80% of funds could be obtained from EU

funding (sustainable mobility). Capacity is 400 users (therefore that many less cars in the municipality.

b. Since **Communal contribution** in the municipality is above national average (about 40€/citizen), it would be more suitable to **lower this tax for those who use RES in new constructions**. An economically sustainable amount would be 1.000 €/ construction.

c. Since Grosuplje is developed above the national average, **municipal tax should be higher**. Now it amounts to only 2,5 \notin / citizen/ year, but raising it for only 1 \notin , municipality would increase budget for 19.000 \notin . These could in turn be used for **subsidizing electric vehicles purchases** and since Grosuplje already has charging stations it would be strategic to enhance number of electric vehicles (subsidy in the amount of 5.000 \notin /vehicle (up to 20 new vehicles per year) = 100.000 \notin).

Evaluation of suggested measures of local fiscal policy to promote		
renewable ei	nergy sources	
Municipality	GROSUPLJE	
Coefficient of development	1,27	
Measure of lo	cal fiscal policy	
Methods for allocation of sources for RES	Raise and differentiation of the	
promotion	Compensation for the use of building land –	
	is set lower than on average in other	
	Slovene municipalities. RES users pay less,	
	non-RES users pay more. Estimated increase	
	in revenue is 15 €/year/citizen on average.	
	Rise of the Compensation for the use of	
	building land for those, who have building	
	plot and do not erect building in defined	
	period because of the speculative purposes,	
	thus hamper municipality development	
	potential. Estimated increase in revenue is 5	
	€/year/citizen on average.	
	Rise of the Municipal tax for 1 €/ citizen/	
	year	
Estimated amount of sources per year	399.000 EUR	
Measures of municipality for promote	ion of the renewable energy sources	
Establishment of Park and Ride system that	Cost: 140.000 EUR/a	
would promote public transport for daily		
migrations with train with free parking		
spaces and/or public bicycles renting with		
five stations throughout municipality.		
Lowering the Communal contribution for	Cost: 150.000 EUR/a	

Table 3: Evaluation data for Grosuplje

those who use RES in new constructions.	
Subsidizing electric vehicles purchases in	Cost: 100.000 EUR/a
the amount of 5.000 €/vehicle	
Financia	l balance
Municipality budget balance	+ 9.000 EUR/a
Technica	l criterion
GHG emissions reduction	16.200 t _{CO2} /a
Reduction of fossil fuels use and/or transition to RES	6.300.000 I/a or 78.750 MWh/a
Cost of adapting to renewable sources in average	5 EUR/MWh
Technical difficulty of adapting to	Medium – main obstacle are habits of
renewable sources	citizens regarding public transportation.
Legal c	riterion
Capacity of the municipality to intervene	High –Compensation for the use of building
through taxation	land and Municipal tax are in municipal
	jurisdiction.
	criterion
Reduction in municipal revenue	none
Compensatory revenue measure required	Yes – through differentiation of the
	Compensation for the use of building land.
An increase in municipal revenue caused	Yes, but used for RES promotion
An increase in municipal expenditure	No
Gender and social	
Does it have a negative impact on gender equality and/or social inclusion?	No
equality and/or social inclusion?	No
equality and/or social inclusion? Does it have a positive impact on gender	No Yes – municipality gives opportunity to
equality and/or social inclusion? Does it have a positive impact on gender quality	No Yes – municipality gives opportunity to everybody to become RES and sustainable
equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion?	No Yes – municipality gives opportunity to everybody to become RES and sustainable mobility user. Measures is connected to
equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion?	No Yes – municipality gives opportunity to everybody to become RES and sustainable mobility user. Measures is connected to area (urban or sub-urban).
equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF	No Yes – municipality gives opportunity to everybody to become RES and sustainable mobility user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY
equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF Percent of energy transition from fossil	No Yes – municipality gives opportunity to everybody to become RES and sustainable mobility user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY
equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF Percent of energy transition from fossil sources to RES	No Yes – municipality gives opportunity to everybody to become RES and sustainable mobility user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY 6,5%

3.2 Municipality of Ivančna Gorica



Municipality Ivančna Gorica, which is part of the Osrednjeslovenska statistical region, measures 227 km²; this ranks it 21th among Slovene municipalities. According to the **Coefficient of municipal development** Ivančna Gorica is averagely developed municipality (Coefficient value is **1,20** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 16,280 people were living in the municipality, which ranks Ivančna Gorica 29th among Slovene municipalities. The population density was 72 people per square kilometre, which was lower than the national average 102 people per square kilometre.

The number of live births was higher than the number of deaths, which means that natural increase per 1,000 population in the municipality was positive. The mean age of people in Ivančna Gorica was 39.7years, which was lower than the national average (42.9).

In contrast to most Slovene municipalities, in Ivančna Gorica the number of young people was higher than the number of old people. Among people aged 15–64 (i.e. working age population) about 66% were persons in employment (i.e. persons in paid employment or self-employed persons), which is more than national average (60%).

The registered unemployment rate was 7.5%, which is less than the national average (11.2%). As in most Slovene municipalities, more women than men were unemployed. In Ivančna Gorica, average monthly gross earnings per person employed by legal persons were about 2% lower than the annual average of monthly earnings for Slovenia; and net earnings about 2% lower.

Table 4: Main data for Ivančna Gorica

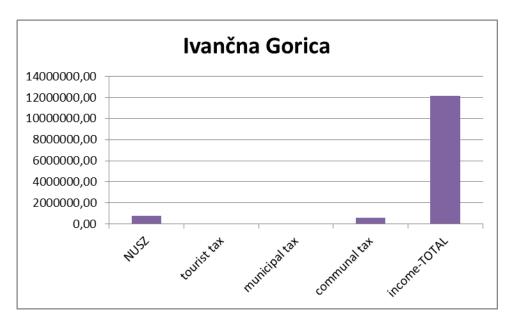
CHARACTERISTICS OF THE IVANČNA GORICA MUNICIPALITY (2016)	lvančna Gorica	Slovenia (average)
Density of population (per km ²)	72	102
Total increase (per 1,000 population)	11	1
Mean age of population (years)	40	43
Registered unemployment rate (%)	8	11
Natural increase (per 1,000 population)	8	
Net migration (per 1,000 population)	3	1
Ageing index	83	125
Average monthly gross earnings (index, SI=100)	98	100
Average monthly net earnings (index, SI=100)	98	100
Employment/population ratio (%)	66	60
Number of passenger cars (per 100 population)	56	53
Municipal waste collected (kg/person)	236	347
Area km2	227	20,273
Population	16,276	2,064,241
Number of persons in paid employment	4,502	824,485
Average monthly net earnings per person in paid employment (EUR)	1,007	1,030
Turnover of enterprises (1,000 EUR)	372,913	98,573,630
Number of persons in employment (by residence)	7,441	824,485
Number of self-employed persons	797	86,684
Number of registered unemployed persons	596	103,152
Average monthly gross earnings per person in paid employment (EUR)	1,546	1,585
Number of enterprises	1,262	196,072
Number of passenger cars	9,152	1,096,523
Municipal waste collected (ton)	3,848	715,826

Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Ivančna Gorica is one of the two partner municipalities (the second being Trebnje) that has **no revenue from municipal taxes**. Other observed revenues don't significantly deviate from the average, so municipal taxes are most important fiscal instrument to be utilized in the future (see Graph 2).

Since Ivančna Gorica is more developed than an average Slovene municipality, there is possibility to raise existing and introduce new taxes for natural and legal persons. With **modest increase of taxes**, municipal government could gain additional revenue from Compensation for the use of building land in the amount 202.000 \notin /year, 10.000 \notin /year with more consistent tourist tax collection, at least 15.000 \notin /year with municipal tax, and additional 67.000 \notin /year from Communal contributions. In total, 294.000 \notin /year could be allocated for enhancing RES.



Graph 2: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

a. Upgrading district heating system on wood biomass by expanding heating network. Since 2013 only 12.000 m2 (with 800 kW) is heated (schools and kindergartens) in radius 340m. With expanding to radius 1.000m, number of heath users would triple (upgrade of boiling room capacity to 2 MW). Investment would amount to approximately 2.5 million \notin ; that can be achieved in 9 year period with lowering costs for heating oil (for 90.000 l/year) and natural gas (for 6 t/year).

b. Optimisation of the district heating system with dynamic thermo-hydraulic system with estimated saving of 10% of cost. Investment is approximately 30.000 EUR, payback period 4 years, than the revenue from savings amounts to 7.500 EUR/year.

c. Digitalisation and management of energy supply in public buildings (which is also obligation of municipalities after the Act of energy management in public buildings from 2018). Investment is estimated to 50.000 EUR, payback period is 5 years, after that period, the revenue from savings amounts to 10.000 EUR/year, which can be used for RES promotion, mainly for increase the number of district heating system users.

d. There is a significant daily migration from Ivančna Gorica to Ljubljana (distance 30km), meaning that Ivančna Gorica could especially promote RES in mobility. Local government should **subsidize electric vehicles purchases** (subsidy in the amount of 5.000 €/vehicle).

Evaluation of suggested measures of local fiscal policy to promote		
renewable energy sources		
Municipality	IVANČNA GORICA	
Coefficient of development	1,20	
Measure of lo	cal fiscal policy	
Methods for allocation of sources for RES	Raise and differentiation of the	
promotion	Compensation for the use of building land.	
	Implementation of the Municipal tax	
	(municipality has no revenue from this tax	
	at all).	
	More consistent tourist tax collection.	
	Increased revenue from Communal	
	contributions.	
Estimated amount of sources per year	294.000 EUR	
Measures of municipality for promote	tion of the renewable energy sources	
Upgrade and extension of the RES district	Cost: approx. 2.500.000 EUR (bank credit;	
heating system.	monthly payments are financed by above	
	fiscal policy measures and lower	
	expenditure for fossil fuels. Payback period	
	is estimated to 9 years)	
Optimisation of the district heating system	Investment: 30.000 EUR, payback period 4	
with dynamic thermo-hydraulic system	years, than revenue from savings of 7.500 EUR/year	
Digitalisation and management of energy	Investment: 70.000 EUR, payback period 5	
supply in public building	years, than revenue from savings of 14.000	
	EUR/year	
Subsidizing electric vehicles purchases in	Cost: 100.000 EUR/a	
the amount of 5.000 €/vehicle		
Financia	l balance	
Municipality budget balance	neutral	
Technica	criterion	
GHG emissions reduction	600 t _{CO2} /a	

Table 5: Evaluation data for Ivančna Gorica

Transition from fossil fuels to RES	2.200 MWh/a	
Cost of adapting to renewable sources in	1.140 EUR/MWh	
average		
Technical difficulty of adapting to	Low – expanding existing heat supply	
renewable sources	infrastructure.	
Legal criterion		
Capacity of the municipality to intervene	High –Compensation for the use of building	
through taxation	land, Municipal tax, Tourist tax and	
	Communal contributions are in municipal	
	jurisdiction.	
Financial criterion		
Reduction in municipal revenue	none	
Compensatory revenue measure required	Yes – through differentiation of the	
	Compensation for the use of building land.	
An increase in municipal revenue caused	No	
An increase in municipal expenditure	No	
Gender and social	inclusion criterion	
Does it have a negative impact on gender	No	
equality and/or social inclusion?		
Does it have a positive impact on gender	Yes – municipality gives opportunity to	
quality	everybody to become RES user. Measures is	
and/or social inclusion?	connected to area (urban or sub-urban).	
Estimation of measures evaluation EF	FECTIVENESS, IMPACT and EFFICIENCY	
Percent of households to change heat	15%	
supply from fossil sources to RES		
GHG emissions fall in residential sector	10%	
Transition from fossil fuels to RES in	18%	
residential sector		
Cost of every Mwh obtained that goes to	1.140 EUR	
renewable energy		

3.3 Municipality of Kamnik



Municipality Kamnik, which is part of the Osrednjeslovenska statistical region, measures 266 km²; this ranks it 15th among Slovene municipalities. According to the **Coefficient of municipal development** Kamnik is averagely developed municipality (Coefficient value is **1,20** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 29,410 people were living in the municipality, which ranks Kamnik 10th among Slovene municipalities. The population density was 111 people per square kilometre, which was higher than the national average 102 people per square kilometre. The number of live births was higher than the number of deaths, which means that natural increase per 1,000 population in the municipality was positive.

The number of people who moved from the municipality was higher than the number of people who moved into the municipality, so net migration per 1,000 population in the municipality was negative. In contrast to most Slovene municipalities, in Kamnik the number of young people was higher than the number of old people.

Among people aged 15–64 (i.e. working age population) about 63% were persons in employment (i.e. persons in paid employment or self-employed persons), which is more than national average (60%).

The registered unemployment rate was 8.6%, which is less than the national average (11.2%). In Kamnik, average monthly gross earnings per person employed by legal persons were about 9% lower than the annual average of monthly earnings for Slovenia; and net earnings about 8% lower.

Table 6: Main data for Kamnik

CHARACTERISTICS OF THE KAMNIK MUNICIPALITY (2016)	Kamnik	Slovenia (average)
Density of population (per km ²)	111	102
Total increase (per 1,000 population)	2	1
Mean age of population (years)	41	43
Registered unemployment rate (%)	9	11
Average monthly gross earnings (index, SI=100)	91	100
Average monthly net earnings (index, SI=100)	92	100
Employment/population ratio (%)	63	60
Municipal waste collected (kg/person)	385	347
Area km2	266	20,273
Population	29,407	2,064,241
Number of persons in paid employment	7,844	824,485
Average monthly net earnings per person in paid employment (EUR)	949	1,030
Turnover of enterprises (1,000 EUR)	677,533	98,573,630
Average monthly gross earnings per person in paid employment (EUR)	1,435	1,585
Number of enterprises	2,586	196,072
Number of passenger cars	15,410	1,096,523
Municipal waste collected (ton)	11,311	715,826

Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

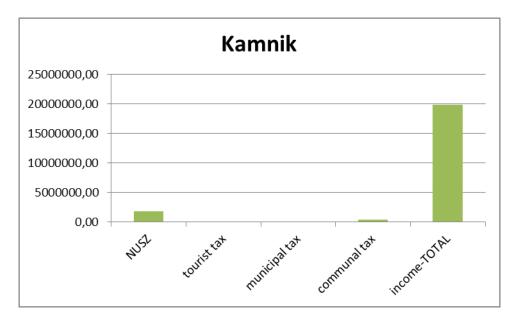
How to allocate sources for RES?

Kamnik municipality is within national average with the exception of municipal tax (see Graph 3). This should be a mayor resource linked to RES. **Municipal tax should apply for legal entities and natural persons**, however under different definition.

Kamnik has specific industry and commerce structure and should focus more on the taxation of legal entities. **Compensation for the use of building land could be raised** for 2 €/citizen/year for natural persons and even more for legal persons if they don't utilize RES.

On the other hand, Kamnik municipality raises significant amount (relatively to other municipalities) in **Tourist tax, that could be linked to promotion of RES** since resources could be

invested in preserving the environment and natural and historical heritage. Additionally, as a tourist destination Kamnik could impose **higher municipal tax for parking etc. or municipal tax for permits to drive in the city center** as it causes pollution. Thus could be in turn linked to RES promotion.



Graph 3: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Whichat RES projects to implement?

- a. Share of Tourist tax (at least 50%, which amounts to 25.000 €) could be allocated for enhancing sustainable touristic development by subsidising solar collector installation (subsidy in amount of 10 % of the total investment).
- b. In line with enhancing touristic activity of the municipality, historical part of the city could be closed for the traffic and parking spaces could offer additional resource (30% higher parking rates amounting to 14.000 €/year), to be invested in subsidizing public transport.
- c. Communal contribution per capita is on the lower side (in comparison to other municipalities) especially If understood within average development coefficient level of Kamnik. With raising Communal contribution for 2 €/citizen/year, municipality could gain additional 60.000 €/year, that could be allocated for subsidizing RES in individual buildings (up to 10% of the investment).
- d. Investment in sustainable mobility with bicycle renting system (municipal investment 28.000 €), in combination with closing city centre and preserving historical part of the city.

Table 7: Evaluation data for Kamnik

Evaluation of suggested measures of local fiscal policy to promote			
renewable e	nergy sources		
Municipality	KAMNIK		
Coefficient of development	1,20		
	cal fiscal policy		
Methods for allocation of sources for RES promotion	 Differentiation of the Compensation for the use of building land – RES users pay less, non-RES users pay more. Estimated increase in revenue is 2 €/year/citizen and even more for legal persons if they don't utilize RES. At least 50% of Tourist tax revenue. 30% higher parking rates in historical part of the city. Raising the Communal contribution for 2 €/year/citizen. 		
Estimated amount of sources per year	99.000 EUR		
	tion of the renewable energy sources		
Enhancement of sustainable touristic development by subsidising solar power plants installation (subsidy in amount of 10 % of the total investment). Subsidizing public transport.	Cost: 25.000 EUR/a Cost: 14.000 EUR/a		
Subsidizing RES in individual buildings (up to 10% of the RES system investment)	Cost: 60.000 EUR/a		
Investment in sustainable mobility with	Cost: 28.000 EUR (municipality share) and		
bicycles renting system	10.000 eur/a		
	I balance		
Municipality budget balance	- 10.000 EUR/a (municipality investment in RES promotion)		
	l criterion		
GHG emissions reduction Reduction of fossil fuels use and/or transition to RES	7.290 t _{co2} /a 2.830.000 l/a or 35.400 MWh/a		
Cost of adapting to renewable sources in average	3,9 EUR/MWh		
Technical difficulty of adapting to	Medium – main obstacle are habits of		
renewable sources	citizens regarding public transportation.		
Legal c	Legal criterion		
Capacity of the municipality to intervene through taxation	High – Tourist tax can be earmarked to sustainable tourism, Compensation for the use of building land, Parking rates and Communal contribution are in municipal jurisdiction.		

Financial criterion		
Reduction in municipal revenue	none	
Compensatory revenue measure required	Yes – through differentiation of the	
	Compensation for the use of building land	
	by the RES and non-RES users	
An increase in municipal revenue caused	Yes, but used for RES promotion	
An increase in municipal expenditure	Yes – 10.000 EUR/a	
Gender and social inclusion criterion		
Does it have a negative impact on gender	No	
equality and/or social inclusion?		
Does it have a positive impact on gender	Yes – municipality gives opportunity to	
quality	everybody to become RES user. Measures is	
and/or social inclusion?	connected to area (urban or sub-urban).	
Estimation of measures evaluation EFFECTIVENESS, IMPACT and EFFICIENCY		
Percent of energy transition from fossil	7%	
sources to RES		
GHG emissions fall in residential and	6,5%	
transport sector		

3.4 Municipality of Kočevje



Municipality Kočevje, which is part of the Jugovzhodna Slovenija statistical region, measures 555 km²; it is <u>the biggest</u> among all Slovene municipalities. According to the **Coefficient of municipal development** Kočevje is among underdeveloped municipalities in the country (Coefficient value is **0,8**2 for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 15,970 people were living in the municipality, which ranks Kočevje 30th among Slovene municipalities. The population density was 29 people per square kilometre, which was lower than the national average 102 people per square kilometre.

The number of live births was lower than the number of deaths. The mean age of people in Kočevje was 43.7 years, which was higher than the national average (42.9). Among people aged 15–64 (i.e. working age population) about 54% were persons in employment (i.e. persons in paid employment or self-employed persons), which is less than national average (60%).

The registered unemployment rate was 22.2%, which is more than the national average (11.2%). As in most Slovene municipalities, more women than men were unemployed.

In Kočevje, average monthly gross earnings per person employed by legal persons were about 14% lower than the annual average of monthly earnings for Slovenia; and net earnings about 12% lower.

Table 8: Main data for Kočevje

CHARACTERISTICS OF THE KOČEVJE MUNICIPALITY (2016)	Kočevje	Slovenia (average)
Density of population (per km ²)	29	102
Total increase (per 1,000 population)	-8	1
Registered unemployment rate (%)	22	11
Ageing index	131	125
Average monthly gross earnings (index, SI=100)	86	100
Average monthly net earnings (index, SI=100)	88	100
Employment/population ratio (%)	54	60
Number of passenger cars (per 100 population)	48	53
Municipal waste collected (kg/person)	296	347
Area km2	555	20,273
Population	15,965	2,064,241
Number of persons in paid employment	4,241	824,485
Average monthly net earnings per person in paid employment (EUR)	907	1,030
Turnover of enterprises (1,000 EUR)	299,703	98,573,630
Number of persons in employment (by residence)	5,756	824,485
Number of self-employed persons	379	86,684
Number of registered unemployed persons	1,623	103,152
Average monthly gross earnings per person in paid employment (EUR)	1,358	1,585
Number of enterprises	972	196,072
Number of passenger cars	7,577	1,096,523
Municipal waste collected (ton)	4,730	715,826

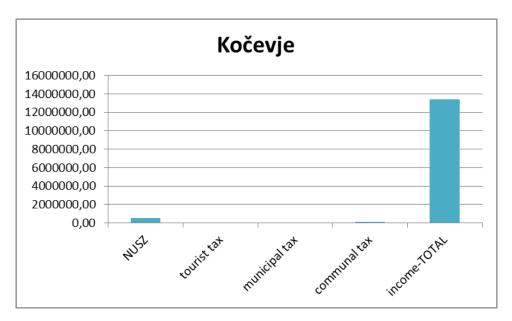
Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Our analysis was focused on the tax revenues that are within municipal authority to modify.¹⁸ There are four taxation possibilities available: Compensation for the use of building land, Tourist tax, Municipal fees and Communal contribution.

Kočevje municipality is well below national average for all four observed revenues (see Graph 4). Kočevje gains the least (out of partner municipalities) from Communal contribution, however this is the largest (in km²) municipality in Slovenia and providing high quality infrastructure might be difficult.

Since Kočevje is economically underdeveloped, with approximately 20% lower income per inhabitant than the national average it would be **more suitable to implement tax credits** for implementing and using RES, rather than introducing higher taxes for businesses and citizens.



Graph 4: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

a. Kočevje has increased number of users of district heating system on wood biomass by ensuring fixed energy price for legal persons (difference in price is covered by municipality). Since number of users increased, cost of energy is lower, which in turn attracts new users to connect to the system. Currently about 40.000 \in is allocated from municipal budget for this purpose. This budget expense is balanced by "new" revenue, that is **optimisation of collecting Compensation for the use of building land**.

b. Municipality subsidizes **energy optimization of multi-family housing**, owned by natural persons in the amount of 7.000 €.

¹⁸ Again, there is a possibility to introduce completely new municipal tax, but due to legal restrictions (there should be no other existing taxation on the area) this never happens.

c. Reconstruction of public lighting lowered energy consumption, resulting in 70.000 \notin /year savings. With savings the reconstruction investment (500.000 \notin) was paid off.

d. Because of geographical characteristics of Kočevje (very large territory, with low population density) there are territories within municipality that will not be connected to district heating system. For those users, municipal government adopted a decree (June 13th 2019) to **subsidize changing boilers with RES-based ones** in the amount of 2.000 €. The municipality, however, has the authority to monitor if users are using new energy product. Costs of subsidizing is balanced with higher income from Compensation for the use of building land in the amount of 2 €/year/building, which totals 24.000 €/year.

e. Optimisation of the district heating system with dynamic thermo-hydraulic system with estimated saving of 10% of cost. Investment is approximately 30.000 EUR, payback period 3 years, than the revenue from savings amounts to 10.000 EUR/year.

f. Digitalisation and management of energy supply in public building (which is also obligation of municipalities after the Act of energy management in public buildings from 2018. Investment is estimated to 95.000 EUR, payback period is 5 years, after that period, the revenue from savings amounts to 19.000 EUR/year, which can be used for RES promotion, mainly for **increase the number of district heating system users**.

Evaluation of suggested measures of local fiscal policy to promote		
renewable energy sources		
Municipality	KOČEVJE	
Coefficient of development	0,82	
Measure of local fiscal policy		
Method for allocation of sources for RES promotion	Differentiation of the Compensation for the use of building land – RES users pay less, non-RES users pay more. Estimated increase in revenue is 4 €/year/building	
Estimated amount of sources per year	48.000 EUR	
Measures of municipality for promotion of the renewable energy sources		
Subsidizing the price of heat to increase number of district heating system users in urban area (93% RES) – measure of limited duration* until users will be enough to stabilise price of heat on competitive level.	Cost: 47.000 EUR/a	
Optimisation of the district heating system with dynamic thermo-hydraulic system	Investment: 30.000 EUR, payback period 3 years, than revenue from savings of 10.000 EUR/year	
Digitalisation and management of energy supply in public building	Investment: 95.000 EUR, payback period 5 years, than revenue from savings of 19.000	

Table 9: Evaluation data for Kočevje

	EUR/year
Subsidizing the boiler change to RES boilers	Cost: 24.000 EUR/a
in sub-urban area	
Financia	l balance
Municipality budget balance	- 148.000 EUR/a* (first year), after 3 rd year -
. , .	14.000 EUR/a, after 5 th year + 5.000
	EUR/year
Technica	l criterion
GHG emissions reduction	150 t_{CO2} /a in 2020 to 600 t_{CO2} /a in 2027
Energy production from RES instead from	560 MWh/a in 2020 to 2.250 MWh/a in
fossil fuels	2027
Cost of adapting to renewable sources	127 EUR/MWh
Technical difficulty of adapting to	Low – existing district heating system
renewable sources	
Legal c	riterion
Capacity of the municipality to intervene	High - Compensation for the use of building
through taxation	land and management of district heating
	system is in the municipal jurisdiction.
Financia	l criterion
Reduction in municipal revenue	None
Compensatory revenue measure required	Yes – through differentiation of the
	Compensation for the use of building land
	by the RES and non-RES users
An increase in municipal revenue caused	Yes
An increase in municipal expenditure	Yes – for limited duration (see *), then
	increase in revenue
	inclusion criterion
Does it have a negative impact on gender	No
equality and/or social inclusion?	
Does it have a positive impact on gender	Yes – municipality gives opportunity to
quality	everybody to become RES user. Measure is
and/or social inclusion?	connected to area (urban or sub-urban).
	FECTIVENESS, IMPACT and EFFICIENCY
Percent of households to change heat	20% till 2027
supply from fossil sources to RES	
GHG emissions fall in residential sector	6% till 2027 (in Kočevje in 2018 more than
	50% of fuels are RES)
Transition from fossil fuels to RES in	16% till 2027
residential sector	
Cost of every Mwh obtained that goes to renewable energy	127 EUR
010101	

3.5 Municipality of Kranj (City of Kranj)



Municipality Kranj, which is part of the Gorenjska statistical region, measures 151 km²; this ranks it 39th among Slovene municipalities. According to the **Coefficient of municipal development** Kranj is an averagely developed municipality (Coefficient value is **1,20** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 56,080 people were living in the municipality, which ranks Kranj 3th among Slovene municipalities. The population density was 372 people per square kilometre, which was higher than the national average 102 people per square kilometre.

The number of live births was higher than the number of deaths. The mean age of people in Kranj was 42.0 years, which was lower than the national average (42.9). Among people aged 15–64 (i.e. working age population) about 63% were persons in employment (i.e. persons in paid employment or self-employed persons), which is more than national average (60%).

The registered unemployment rate was 9.1%, which is less than the national average (11.2%). As in most Slovene municipalities, more women than men were unemployed.

In Kranj, average monthly gross earnings per person employed by legal persons were about 1% higher than the annual average of monthly earnings for Slovenia; and net earnings about 1% higher.

Table 10: Main data for Kranj

CHARACTERISTICS OF THE KRANJ MUNICIPALITY (2016)	Kranj	Slovenia (average)
Density of population (per km ²)	151	102
Total increase (per 1,000 population)	11	1
Mean age of population (years)	40	43
Registered unemployment rate (%)	10	11
Natural increase (per 1,000 population)	5	
Net migration (per 1,000 population)	7	1
Ageing index	83	125
Average monthly gross earnings (index, SI=100)	90	100
Average monthly net earnings (index, SI=100)	92	100
Employment/population ratio (%)	65	60
Number of passenger cars (per 100 population)	52	53
Municipal waste collected (kg/person)	313	347
Area km2	134	20,273
Population	20,181	2,064,241
Number of persons in paid employment	6,552	824,485
Average monthly net earnings per person in paid employment (EUR)	943	1,030
Turnover of enterprises (1,000 EUR)	646,853	98,573,630
Number of persons in employment (by residence)	8,811	824,485
Number of self-employed persons	766	86,684
Number of registered unemployed persons	911	103,152
Average monthly gross earnings per person in paid employment (EUR)	1,428	1,585
Number of enterprises	1,875	196,072
Number of passenger cars	10,605	1,096,523
Municipal waste collected (ton)	6,323	715,826

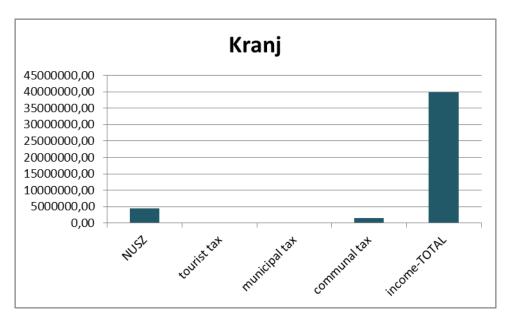
Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Since the development coefficient of Kranj is 22% above the average, in this municipality **the negative tax discrimination approach** can be applied, as this will not significantly affect the social status of the municipality population or local economy.

Among all partner municipalities Kranj has in absolute terms the most total revenue, however it is also the biggest (regarding the number of the population), and when per capita revenue is observed, Kranj is well within national average range. The communal contribution and NUSZ are utilized to satisfying levels, and **most room for improvement is within municipal taxes.**

Compensation for the use of building land is on the high end (80 €/citizen), thus part of this resource could be reallocated to subsidize change from traditional energy sources to RES (50.000 €/ year).



Graph 5: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

By far, the most important measure to reduce the carbon footprint in the municipality of Kranj is to invest in the public transport network. In 2018, there were about 500,000 users/ year, but the number of users does not increase due to high ticket prices, last increased in 2013.

a. Restriction of entry into the city centre for motor vehicles to promote preservation of the historical part of the city and promoting use of electric vehicles and use of public transport. The latter fostered by **subsidizing cost of public transport**, decrease of ticket price for urban and suburban passenger transport and increase frequency of bus runs, which increases competitiveness of public passenger transport.

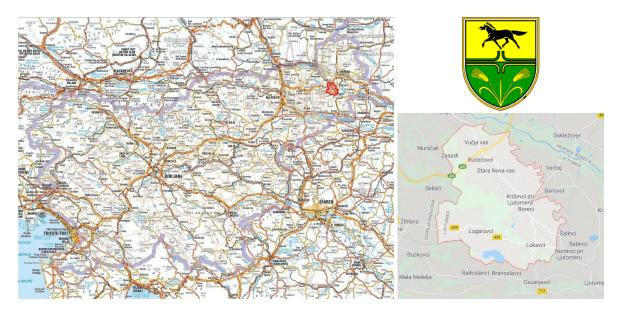
- **b.** Possible revenue to be reallocated is from **municipal tax** (specifically parking fees), increase of number of transport ticket sold and **increased revenue from tourist tax**, as the city without or less traffic is the basis for the development of urban tourism.
- c. Additionally those legal persons that produce high levels of CO₂ should pay 5 % higher Compensation for the use of building land.
- **d.** Investment in **sustainable mobility** with bicycles renting system, in combination with closing city centre and minimizing air pollution. Investment in bicycle renting system can be co-founded by EU funds (50%), municipality can gather other 50% by collecting Ecological tax, **Environmental tax for environmental pollution due to waste disposal** (currently there is no revenue from these sources).

Evaluation of suggested measures of local fiscal policy to promote		
renewable energy sources		
Municipality	KRANJ	
Coefficient of development	1,20	
Measure of local fiscal policy		
Methods for allocation of sources for RES promotion	 Reallocation of the Compensation for the use of building land – rise for legal entities, which do not use energy efficient or excessively burden environment up to 5% An increase in parking fee in the city center (now stands at € 1 / hour), which is among the cheapest among Slovenian city municipalities by 30% 30% increase in the number of public transportation ticket sold Tourist tax = the city without or less traffic is the basis for the development of urban tourism 	
Estimated amount of sources per year	210.000 EUR	
Measures of municipality for promo	tion of the renewable energy sources	
Decrease of ticket price for urban and suburban passenger transport by 30%.	Cost: 120.000 EUR/a	
Increase frequency of bus runs represents more competitiveness of public passenger transport.	Cost: 90.000 EUR/a	
Traffic restriction of entry into the city center	Cost: -	
Gradually exchange the buses for those which utilize RES	Cost: 50.000 EUR/a (municipality share)	

Table 11: Evaluation data for Kranj

Financia	l balance	
Municipality budget balance	- 50.000 EUR/a (municipality investment in	
	RES promotion in public transportation)	
Technical criterion		
GHG emissions reduction	13.900 t _{CO2} /a	
Reduction of fossil fuels use and/or	5.400.000 l/a or 67.500 MWh/a	
transition to RES		
Cost of adapting to renewable sources in	3,8 EUR/MWh	
average		
Technical difficulty of adapting to	Medium – main obstacle are habits of	
renewable sources	citizens regarding public transportation.	
	riterion	
Capacity of the municipality to intervene	High – Tourist tax can be earmarked to	
through taxation	sustainable tourism, Compensation for the	
	use of building land and Parking rates are in	
	municipal jurisdiction.	
	criterion	
Reduction in municipal revenue	none	
Compensatory revenue measure required	Yes – through differentiation of the	
	Compensation for the use of building land	
	by legal entities, which cause environment	
	pollution.	
An increase in municipal revenue caused	Yes, but used for RES promotion	
An increase in municipal expenditure	Yes – 50.000 EUR/a	
	inclusion criterion	
Does it have a negative impact on gender equality and/or social inclusion?	No	
Does it have a positive impact on gender	Yes – municipality gives opportunity to	
quality	everybody to become RES and sustainable	
and/or social inclusion?	mobility user. Measures is connected to	
	area (urban or sub-urban).	
Estimation of measures evaluation EF	FECTIVENESS, IMPACT and EFFICIENCY	
Percent of energy transition from fossil	6%	
sources to RES		
GHG emissions fall in residential and	4,5%	
transport sector		
The reach of this measure	about 150.000 users/year	

3.6 Municipality of Križevci



Municipality Križevci, which is part of the Pomurska statistical region, measures 46 km²; this ranks it 138th among Slovene municipalities. According to the **Coefficient of municipal development** Križevci is an underdeveloped municipality (Coefficient value is **0,96** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 3,640 people (about 1,890 men and 1,750 women) were living in the municipality, which ranks Križevci 135th among Slovene municipalities. The population density was 79 people per square kilometre, which was lower than the national average 102 people per square kilometre. The number of live births was lower than the number of deaths.

The mean age of people in Križevci was 45.2 years, which was higher than the national average (42.9). As in most Slovene municipalities, in Križevci the number of old people was higher than the number of young people: there were 173 people, aged 65 or more, per 100 people aged 0–14. This ratio shows that the value of the ageing index was higher than the national average 125.

Among people aged 15–64 (i.e. working age population) about 52% were persons in employment (i.e. persons in paid employment or self-employed persons), which is less than national average (60%). The registered unemployment rate was 11.8%, which is more than the national average (11.2%). As in most Slovene municipalities, more women than men were unemployed. In Križevci, average monthly gross earnings per person employed by legal persons were about 3% lower than the annual average of monthly earnings for Slovenia; and net earnings about 2% lower.

Table 12: Main data for Križevci

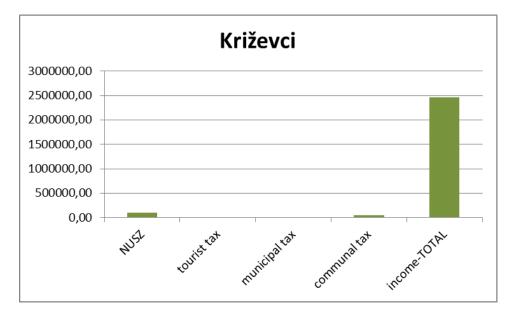
CHARACTERISTICS OF THE KRIŽEVCI MUNICIPALITY (2016)	Križevci	Slovenia (average)
Density of population (per km ²)	79	102
Total increase (per 1,000 population)	-2	1
Mean age of population (years)	45	43
Registered unemployment rate (%)	12	11
Natural increase (per 1,000 population)	-4	
Ageing index	173	125
Average monthly gross earnings (index, SI=100)	97	100
Average monthly net earnings (index, SI=100)	98	100
Employment/population ratio (%)	52	60
Number of passenger cars (per 100 population)	52	53
Municipal waste collected (kg/person)	256	347
Area km2	46	20,273
Population	3,638	2,064,241
Number of persons in paid employment	936	824,485
Average monthly net earnings per person in paid employment (EUR)	1,004	1,030
Turnover of enterprises (1,000 EUR)	150,940	98,573,630
Average monthly gross earnings per person in paid employment (EUR)	1,533	1,585
Number of enterprises	237	196,072
Number of passenger cars	1,863	1,096,523
Municipal waste collected (ton)	930	715,826

Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Križevci is an averagely developed Slovene municipality, however it has below average revenues from taxes. Most notably **there is no revenue from Tourist tax** despite municipality strategic orientation towards sustainable tourism. Municipal government could also **raise Compensation** for the use of building land and Communal contributions. In total 70.000 €/year could be allocated for enhancing RES.

Since Križevci is promoting green tourism and sustainable environment, RES should be a part of the local development strategy.



Graph 6: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

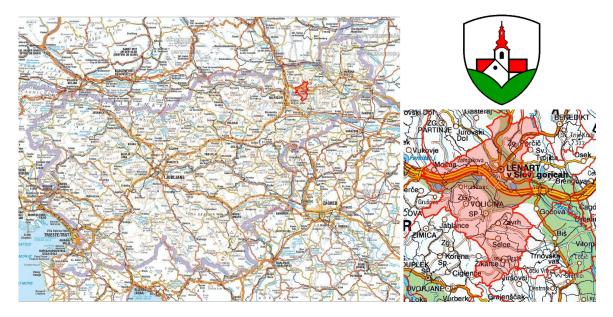
- **a.** One of important municipality development strategy cornerstones is sustainable culinary and wine tourism, which could be **upgraded with eco-tourism**, for which there are all conditions met. Necessary condition for planning and management of energy resources is to include and update with this strategy orientation into Local energy concept (LEK), which is currently obsolete.
- **b.** Installation of solar power plants on all tourist objects (farms) and public buildings, municipal subsidy for citizens should be in amount of 10% of the investment.
- **c.** Installing solar collectors to provide thermal energy for hot water, where appropriate (i.e. kindergarten) municipal subsidy should be in amount of 10% of the investment.
- **d.** Installing **systems for heating with RES on all tourist objects** (wood biomass or heat pump); municipal subsidy should be in amount of 10% of the investment.

Table 13: Evaluation data for Križevci

Evaluation of suggested measure	es of local fiscal policy to promote		
renewable e	renewable energy sources		
Municipality	KRIŽEVCI		
Coefficient of development	0,96		
Measure of lo	cal fiscal policy		
Methods for allocation of sources for RES	Rise and differentiation of the		
promotion	Compensation for the use of building land.		
	RES users pay less, non-RES users pay more.		
	Estimated revenue increase in total of 10%.		
	Implementation of the Municipal tax		
	(municipality has no revenue from this tax		
	at all).		
	Implementation of the Tourist tax		
	(municipality has no revenue from this tax at all).		
	Increased and differentiated Communal		
	contributions, which increases revenue,		
	ear-marked for RES promotion, for 10%.		
Estimated amount of sources per year	70.000 EUR		
Measures of municipality for promo	tion of the renewable energy sources		
Updating the Local energy concept (LEK)	Cost: 12.000 EUR		
Subsidizing the installation of solar power	Subsidies and investment: 40.000 EUR/year,		
plants on all tourist objects and public	payback period 10 years, than revenue from		
buildings by 20%	savings of at least 10.000 EUR/year		
Subsidizing the installation of solar	Cost: 10.000 EUR/year		
collectors for water heating by 10%			
Subsidizing the systems for heating with	Cost: 20.000 EUR/year		
RES on all tourist objects 10%			
	al balance		
Municipality budget balance	- 12.000 EUR/a (first year), after 10 th year		
	+10.000 EUR/year		
	Il criterion		
GHG emissions reduction	145 t _{CO2} /a		
Transition from fossil fuels to RES	350 MWh/a		
Cost of adapting to renewable sources in	200 EUR/MWh		
average			
Technical difficulty of adapting to	Low		
renewable sources			
—	criterion		
Capacity of the municipality to intervene	High – High – Tourist tax can be earmarked		
through taxation	to eco-tourism, Compensation for the use		
	of building land, Municipal tax and		
	Communal contributions and Parking rates		
	are in municipal jurisdiction.		

Financial	criterion
Reduction in municipal revenue	none
Compensatory revenue measure required	Yes – through differentiation of the
	Compensation for the use of building land
	and Communal contribution.
An increase in municipal revenue caused	Yes, after 5 th year.
An increase in municipal expenditure	Yes, first 5 years.
Gender and social	inclusion criterion
Does it have a negative impact on gender	No
equality and/or social inclusion?	
Does it have a positive impact on gender	Yes – municipality gives opportunity to
quality	everybody to become RES user. Measures is
and/or social inclusion?	connected to area (urban or sub-urban).
Estimation of measures evaluation EF	FECTIVENESS, IMPACT and EFFICIENCY
Percent of buildings to change heat supply	10%
from fossil sources to RES	
GHG emissions fall residential, tourist and	9%
public sector	
Transition from fossil fuels to RES in	15%
residential, tourist and public sector	
Cost of every Mwh obtained that goes to renewable energy	350 EUR

3.7 Municipality of Lenart



Municipality Lenart, which is part of the Podravska statistical region, measures 62 km²; this ranks it 111th among Slovene municipalities. According to the **Coefficient of municipal development** Lenart is averagely developed municipality (Coefficient value is **1,11** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 8,270 people were living in the municipality, which ranks Lenart 65th among Slovene municipalities. The population density was 133 people per square kilometre, which was higher than the national average 102 people per square kilometre.

The number of live births was lower than the number of deaths. The mean age of people in Lenart was 43.4 years, which was higher than the national average (42.9). As in most Slovene municipalities, in Lenart the number of old people was higher than the number of young people: there were 128 people, aged 65 or more, per 100 people aged 0–14. This ratio shows that the value of the ageing index was higher than the national average 125.

Among people aged 15–64 (i.e. working age population) about 55% were persons in employment (i.e. persons in paid employment or self-employed persons), which is less than national average (60%). The registered unemployment rate was 9.1%, which is less than the national average (11.2%).

As in most Slovene municipalities, more women than men were unemployed. In Lenart, average monthly gross earnings per person employed by legal persons were about 17% lower than the annual average of monthly earnings for Slovenia; and net earnings about 14% lower.

Table 14: Main data for Lenart

CHARACTERISTICS OF THE LENART MUNICIPALITY (2016)	Lenart	Slovenia (average)
Density of population (per km ²)	133	102
Total increase (per 1,000 population)	-3	1
Mean age of population (years)	43	43
Registered unemployment rate (%)	9	11
Ageing index	128	125
Average monthly gross earnings (index, SI=100)	83	100
Average monthly net earnings (index, SI=100)	86	100
Employment/population ratio (%)	55	60
Number of passenger cars (per 100 population)	52	53
Municipal waste collected (kg/person)	535	347
Area km2	62	20,273
Population	8,270	2,064,241
Number of persons in paid employment	3,969	824,485
Average monthly net earnings per person in paid employment (EUR)	885	1,030
Turnover of enterprises (1,000 EUR)	267,592	98,573,630
Number of persons in employment (by residence)	2,995	824,485
Number of self-employed persons	351	86,684
Number of registered unemployed persons	296	103,152
Average monthly gross earnings per person in paid employment (EUR)	1,313	1,585
Number of enterprises	628	196,072
Number of passenger cars	4,307	1,096,523
Municipal waste collected (ton)	4,425	715,826

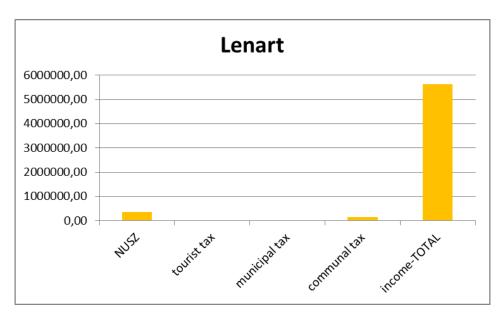
Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Lenart, as does the Municipality of Križevci, performs the poorest regarding raising revenue from observed mechanisms. Both have no tourist taxes (admittedly they are not touristic destinations) and no municipal taxes.

The revenue from Communal contribution is also low, especially since both municipalities are smaller, thus maintaining infrastructure is not as costly. Lenart performs better on the development index scale, and thus have better potential to tax local population.

Since Lenart is slightly more developed than an average Slovene municipality, there is possibility to raise existing taxes for natural and legal persons. With modest increase of taxes, municipal government could raise Compensation for the use of building land for 10%, municipal tax for 10%, Communal contributions for 10%. In total 80.000 €/year could be allocated for enhancing RES.



Graph 7: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

a. The biggest challenge Lenart is facing with regard to RES is the district heating system. Although it is operating since 2011, has length of 5.000 m and 600 users, its capacity is not big enough at peak loads, when the heat is additionally produced with fossil oil. Because of the high cost of management and fossil fuel, Lenart has very high heat cost for consumers (over 110 €/MWh). High cost of energy burdens existing users, resulting in more and more disconnection from the system, which in turn again means higher cost of energy. The obstacle is, that municipality gave concession for management of the district heating system to the private entity and thus lost control over heat supply for the time of the contract. **Energy cost for long-distance heating system for users should be subsidized** (not to exceed 100 € /kWh).

b. Elimination of oil boilers using the heat accumulation and optimisation of the system.

c. Optimisation of the district heating system with dynamic thermo-hydraulic system with estimated saving of 10% of cost. Investment is approximately 30.000 EUR, payback period 4 years, than the revenue from savings amounts to 7.500 EUR/year.

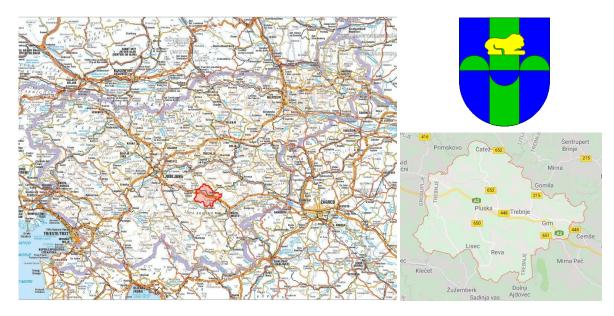
d. Digitalisation and management of energy supply in public buildings (which is also obligation of municipalities after the Act of energy management in public buildings from 2018. Investment is estimated to 40.000 EUR, payback period is 5 years, after that period, the revenue from savings amounts to 8.000 EUR/year, which can be used for RES promotion, mainly for **increase the number of district heating system users**.

Evaluation of suggested measures of local fiscal policy to promote renewable energy sources		
Municipality	LENART	
Coefficient of development	1,11	
Measure of local fiscal policy		
Methods for allocation of sources for RES promotionRise and differentiation of the Compensation for the use of building la RES users pay less, non-RES users pay m 		
Estimated amount of sources per year	ear-marked for RES promotion, for 10%. 80.000 EUR	
Measures of municipality for promo	tion of the renewable energy sources	
Subsidizing the price of heat to increase number of district heating system users in urban area – measure of limited duration* until users will be enough to stabilise price of heat on competitive level.	Cost: 20.000 EUR/year	
Optimisation of the district heating system with dynamic thermo-hydraulic system	Investment: 30.000 EUR, payback period 4 years, than revenue from savings of 7.500 EUR/year	
Digitalisation and management of energy supply in public building	Investment: 40.000 EUR, payback period 5 years, than revenue from savings of 8.000 EUR/year	
Elimination of oil boiler from the district heating system to become a nearly 100%	Cost: 300.000 EUR (bank credit; monthly payments are financed by above fiscal	

Table 15: Evaluation data for Lenart

RES using the heat accumulation and optimisation of the system	policy measures and lower expenditure for fossil fuels. Payback period is estimated to 5 years)	
Financial balance		
Municipality budget balance	- 310.000 EUR/a* (first year), after 5 th year +75.500 EUR/year	
Technica	l criterion	
GHG emissions reduction	300 t _{co2} /a	
Transition from fossil fuels to RES	1.200 MWh/a	
Cost of adapting to renewable sources in	325 EUR/MWh	
average		
Technical difficulty of adapting to	Low – upgrading existing heat supply	
renewable sources	infrastructure by exchange of oil and wood	
	biomass boiler.	
Legal c	riterion	
Capacity of the municipality to intervene	Low –Although the Compensation for the	
through taxation	use of building land, Municipal tax and	
	Communal contributions are in municipal	
	jurisdiction, private concessionaire might	
	not be ready for changes in district heating	
	system management.	
Financia	criterion	
Reduction in municipal revenue	none	
Compensatory revenue measure required	Yes – through differentiation of the	
	Compensation for the use of building land	
	Compensation for the use of building land and Communal contribution.	
An increase in municipal revenue caused		
An increase in municipal revenue caused An increase in municipal expenditure	and Communal contribution.	
An increase in municipal expenditure	and Communal contribution. Yes, after 5 th year.	
An increase in municipal expenditure	and Communal contribution. Yes, after 5 th year. Yes, first 5 years.	
An increase in municipal expenditure Gender and social	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion?	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion?	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion?	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is connected to area (urban or sub-urban).	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF Percent of households to change heat	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF Percent of households to change heat supply from fossil sources to RES	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY 15%	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF Percent of households to change heat supply from fossil sources to RES GHG emissions fall in residential sector	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY 15% 7%	
An increase in municipal expenditure Gender and social Does it have a negative impact on gender equality and/or social inclusion? Does it have a positive impact on gender quality and/or social inclusion? Estimation of measures evaluation EF Percent of households to change heat supply from fossil sources to RES GHG emissions fall in residential sector Transition from fossil fuels to RES in	and Communal contribution. Yes, after 5 th year. Yes, first 5 years. inclusion criterion No Yes – municipality gives opportunity to everybody to become RES user. Measures is connected to area (urban or sub-urban). FECTIVENESS, IMPACT and EFFICIENCY 15% 7%	

3.8 Municipality of Trebnje



Municipality Trebnje, which is part of the Jugovzhodna Slovenija statistical region, measures 163 km²; this ranks it 34th among Slovene municipalities. According to the **Coefficient of municipal development** Trebnje is above average developed municipality (Coefficient value is **1,23** for years 2018 and 2019).

Statistical data for 2016 reveal the following: In the middle of 2016 about 12,440 people were living in the municipality, which ranks Trebnje 43th among Slovene municipalities. The population density was 76 people per square kilometre, which was lower than the national average 102 people per square kilometre.

The number of live births was higher than the number of deaths, which means that natural increase per 1,000 population in the municipality was positive. It was 3.1 (in Slovenia 0.3). The number of people who moved from the municipality was lower than the number of people who moved into the municipality, so net migration per 1,000 population in the municipality was positive. It was 10.7.

The sum of natural increase and net migration per 1,000 population in the municipality was positive. It was 13.7 (in Slovenia 0.8). The mean age of people in Trebnje was 40.7 years, which was lower than the national average (42.9). Among people aged 15–64 (i.e. working age population) about 67% were persons in employment (i.e. persons in paid employment or self-employed persons), which is more than national average (60%).

The registered unemployment rate was 8.5%, which is less than the national average (11.2%). In Trebnje, average monthly gross earnings per person employed by legal persons were about 9% lower than the annual average of monthly earnings for Slovenia; and net earnings about 8% lower.

Table 16: Main data for Trebnje

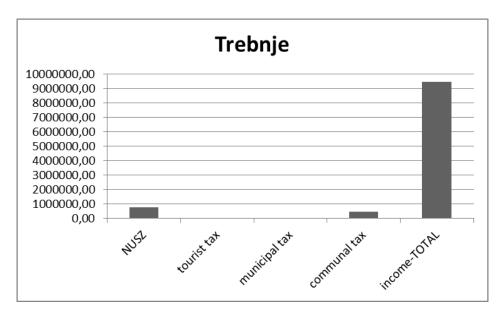
CHARACTERISTICS OF THE TREBNJE MUNICIPALITY (2016)	Trebnje	Slovenia (average)
Density of population (per km ²)	76	102
Total increase (per 1,000 population)	14	1
Mean age of population (years)	41	43
Registered unemployment rate (%)	9	11
Average age of passenger cars (years)	10	10
Natural increase (per 1,000 population)	3	
Net migration (per 1,000 population)	11	1
Ageing index	89	125
Average monthly gross earnings (index, SI=100)	91	100
Average monthly net earnings (index, SI=100)	92	100
Number of dwellings, Dwelling Stock (per 1,000 population)	401	410
Number of passenger cars (per 100 population)	56	53
Municipal waste collected (kg/person)	211	347
Area km2	163	20,273
Population	12,438	2,064,241
Number of persons in paid employment	4,485	824,485
Average monthly net earnings per person in paid employment (EUR)	951	1,030
Turnover of enterprises (1,000 EUR)	561,554	98,573,630
Number of persons in employment (by residence)	5,688	824,485
Number of self-employed persons	647	86,684
Number of registered unemployed persons	523	103,152
Average monthly gross earnings per person in paid employment (EUR)	1,439	1,585
Number of enterprises	1,039	196,072
Number of passenger cars	7,061	1,096,523
Municipal waste collected (ton)	2,622	715,826

Source: Adapted from the Statistical Office of the Republic of Slovenia (SURS) database.

How to allocate sources for RES?

Trebnje is one of the two (the second being Ivančna Gorica) pilot municipalities that has no revenue from municipal taxes (see Graph 8). Since other comparable municipalities raise about **45.000 €/year** in **municipal tax**, Trebnje should reconsider implementing this tax.

Compensation for the use of building land is also low and raising it only minimally (comparable to other municipalities that are as developed as Trebnje) would add additional **75.000 €/year**. Thus **120.000 €/year** could be invested RES.



Graph 8: Observed revenues and total revenue in 2016 (adapted from Internal reports of Ministry of Finances).

Which RES projects to implement?

- a. Upgrading district heating system to enable connection of individual objects, since current system supplies heath only to city centre and industrial part of the city. Instead of enhancing capacity of boiler room, funds should be allocated to expanding heating network. Investment is approximately 700.000 € (bank credit; monthly payments are financed from above-mentioned taxation).
- **b.** Optimisation of the district heating system with dynamic thermo-hydraulic system with estimated saving of 10% of cost. Investment is approximately 30.000 EUR, payback period 4 years, than the revenue from savings amounts to 7.500 EUR/year.
- c. Digitalisation and management of energy supply in public buildings (which is also obligation of municipalities after the Act of energy management in public buildings from 2018. Investment is estimated to 50.000 EUR, payback period is 5 years, after that period, the revenue from savings amounts to 10.000 EUR/year, which can be used for RES promotion, mainly for increase the number of district heating system users.

Table 17: Evaluation data for Trebnje

Evaluation of suggested measures of local fiscal policy to promote			
renewable energy sources			
Municipality	TREBNJE		
Coefficient of development	1,23		
Measure of log	cal fiscal policy		
Methods for allocation of sources for RES	Rise and differentiation of the		
promotion	Compensation for the use of building land –		
	is set lower than on average in other		
	comparable Slovene municipalities.		
	Implementation of the Municipal tax		
	(municipality has no revenue from this tax		
	at all).		
Estimated amount of sources per year	120.000 EUR		
	ion of the renewable energy sources		
Upgrade and extension of the RES district	Cost: approx. 700.000 EUR (bank credit;		
heating system.	monthly payments are financed by above		
	fiscal policy measures)		
Optimisation of the district heating system	Investment: 30.000 EUR, payback period 4		
with dynamic thermo-hydraulic system	years, than revenue from savings of 7.500		
	EUR/year		
Digitalisation and management of energy	Investment: 50.000 EUR, payback period 5		
supply in public building	years, than revenue from savings of 10.000		
	EUR/year		
	l balance		
Municipality budget balance	neutral		
Technical			
GHG emissions reduction	400 t _{co2} /a		
Transition from fossil fuels to RES	1.500 MWh/a		
Cost of adapting to renewable sources in average	470 EUR/MWh		
Technical difficulty of adapting to	Low – expanding existing heat supply		
renewable sources	infrastructure.		
Legal c	Legal criterion		
Capacity of the municipality to intervene	High –Compensation for the use of building		
through taxation	land and Municipal tax are in municipal		
	jurisdiction.		
Financial criterion			
Reduction in municipal revenue	none		
Compensatory revenue measure required	Yes – through differentiation of the		
	Compensation for the use of building land.		
An increase in municipal revenue caused	No		
An increase in municipal expenditure	No		
Gender and social inclusion criterion			
Does it have a negative impact on gender	No		

equality and/or social inclusion?	
Does it have a positive impact on gender	Yes – municipality gives opportunity to
quality	everybody to become RES user. Measures is
and/or social inclusion?	connected to area (urban or sub-urban).
Estimation of measures evaluation EF	FECTIVENESS, IMPACT and EFFICIENCY
Percent of households to change heat	15%
supply from fossil sources to RES	
GHG emissions fall in residential sector	8%
Transition from fossil fuels to RES in	15%
residential sector	
Cost of every Mwh obtained that goes to	470 EUR
renewable energy	

4 NEEDED REFORMS FOR ENHANCING FISCAL CAPACITY TO PROMOTE RES

Due to the extreme heterogeneity of municipal sizes in Slovenia, there are a number of small municipalities that are struggling to meet regulatory demands and standards (for more on this see Bačlija Brajnik 2017).¹⁹ Additionally heterogeneity prevents national government to decentralize more tasks to local governments as symmetrical legislation defines all municipalities equally (with some minor differences for urban municipalities). This in turn affects local governments ability to adapt local policies to local specifics.

However, when arguing that municipalities are not able to perform certain new tasks, one has to evaluate whether they can cope with their existing tasks. Prebilič and Bačlija (2013)²⁰ presented research on the administrative capacity of Slovene municipalities. They concluded that when the levels of administrative capacity are correlated with the sizes of the municipalities (according to the number of inhabitants), small as well as medium municipalities (with up to 10,000 inhabitants) tend to exhibit either a medium or lower level of administrative capacity, while larger ones municipalities (with more than 10,000 inhabitants) exhibit a middle to high level of administrative capacity.

The point at which a relatively low administrative capacity turns into a medium to high administrative capacity can be set as 10,000 inhabitants, which is also a number very close to the population of an average Slovenian municipality. Very small municipalities (with less than 5000 inhabitants) prove to be especially problematic in this respect, since 90% of them show a low or medium level of administrative capacity.

Fiscal capacity is closely linked to administrative capacity as in order for municipality to be able to crate tax, implement it and tax its population it should possess some level of administrative capacity and this might be challenging for smaller municipalities. This is reflected in the Court of Audit report,²¹ where a significant difference among municipalities in gaining revenues from own taxes is observed.²²

In observed timeframe from 2007 to 2010 municipalities on average raised 136,6 EUR of own taxes per inhabitant (lowest Rogaševci with 8,7 EUR per inhabitant and highest Kranjska Gora with 368 EUR per inhabitant). On an average, own municipal taxes represented 14,2% of all municipal revenue (lowest 1% in Žetale and highest 25,4% Piran).

 ¹⁹Bačlija Brajnik, I. 2017. Inter-municipal Cooperation in Slovenia: An Intermediate Step Towards Regionalisation.
 In: Inter-Municipal Cooperation in Europe: Institutions and Governance, Teles, Filipe, Swianiewicz, Pawel (Eds.), pp: 245-257. Palgrave McMillan.

²⁰ Prebilič, V, Bačlija, I. 2013. Dynamics of administrative capacity in Slovenian municipal administrations. Lex localis, 11 (3): 545-564.

²¹ Available at http://www.rs-rs.si/rsrs/rsrs.nsf/I/KC73BA090AA4B8946C12579B9001E4E89/\$file/Obcine_RSP.pdf

²² Calculations were made on the bases of all own municipal taxes, excluding Income tax, that is set and reallocated by the central government, thus according to European Charter on Local Self-Government it is not own tax.

Number of inhabitants	Share of own tax resources (without Income tax)	Own tax resources (without Income tax) per inhabitant per year (in EUR)
up to 1.999	5,1%	59,7
2.000 to 4.999	7,9%	77,9
5.000 to 9.999	11,4%	111,9
10.000 to 19.999	12,0%	110,2
from 20.000	19,1%	183,2
all municipalities (average)	14,2%	136,3

Table 18: Municipal own tax resources from 2007-2010

Source: Court of Audit, 2012.

Within observed timeframe (2007-2010) it is evident that smaller municipalities gained much less revenue from own tax resources, additionally backing the claim that they are excessively dependent on transfer revenue (see Table 18). The same trend can be observed when own non-tax resources are presented (see Table 19).

On the individual municipal level there are again significant differences in rising own non-tax revenues (without national transfers). On average own non-tax revenues present 200 EUR per inhabitant (lowest Loški Potok 24,2 EUR, highest Komenda 695,9 EUR), which represents 20,9% of all municipal revenues (lowest Loški Potok 1,6%, highest Komenda 54,4%).

Number of inhabitants	Share of own non-tax resources (without transfers)	Own non-tax resources (without transfers) per inhabitant per year (in EUR)
up to 1.999	9,8%	115,6
2.000 to 4.999	14,1%	139,4
5.000 to 9.999	19,4%	189,7
10.000 to 19.999	19,0%	174,3
from 20.000	25,2%	242,6
all municipalities (average)	20,9%	200,0

Source: Court of Audit, 2012.

According to this data, it is highly unlikely that municipalities would be able to negotiate higher fiscal autonomy. If some municipalities (statistically more likely bigger ones) are able to gain more revenue from tax and non-tax own resources, then there is either a low administrative capacity the cause for the smaller municipalities to gain less revenue or some other reason (in small municipalities local governments are closer to its electorate, thus more reluctant to implement additional taxation).

Strategy that is most likely for local governments to adopt regarding RES promotion is to utilize already existing tax and non-tax measures. Ether by defining policy objectives for RES and earmark revenues to promote this policy or by enhance taxation capacity (update databases that are used for taxation – e.g. real estate, inspection). Aside direct fiscal instrument, municipalities can utilize indirect measures. These are numerous, but some are already listed as a good starting point in existing legislation. For example, Municipal Council can adopt **decree on priority which energy source for heating should be used**. This is already an option under **Energy Act**.²³

Other possible revenue for RES promotion is so called **self-imposed contribution** and could only be generated with high community consensus. This in turn has spill-over effect. If local government includes citizens and other stakeholders in RES policy making and enables them to have great input in this policy area it is more likely that citizens will vote for self-imposed contribution (According to **Self-imposed Contributions Act**²⁴ there has to be a referendum on the self-imposed contribution in the municipality) If they understand the rationale behind this financial burden. There is even an option of linking this to a major energy project that will in turn offer new jobs and investing opportunities. However, this mechanism is highly underused - in 2016 the total revenue (from all municipalities together) from self-imposed contribution was **16.246 EUR**.

As fiscal policies can be numerous (direct, indirect, earmarked, non-earmarked, user charges, general taxation, optimizing exiting taxation, implementing new tax), it is up to individual case study (municipality) as of what policy will be utilized (according to evaluation of existing revenue, physical characteristics of the municipality, citizen's preferences). However there are **guidelines** to be followed regardless of the policy plan undertaken (Davey 2011):²⁵

- The basic principles for determining local taxation should be **fairness** (taxation should be commensurate with each taxpayer's ability to pay) and **efficiency** (a high yield and a low collection cost).
- When they establish the level of local taxes, local authorities should do so as **openly** as possible, so that their **decisions are clear to the public**. Measures ensuring the transparency of fiscal decisions should include publishing (in paper and electronic version), posting up and possibly disseminating all draft fiscal decisions, the documents needed to understand them and the decisions actually taken.
- Local authorities should vary the level of taxation only in order to adapt the level of services to local needs and preferences.
- Local authorities should **avoid introducing too many taxes**, as this inevitably increases administration and is liable to increase the cost of collection, grounds for litigation, etc.

²³ Official Gazette RS, no. 17/2014.

²⁴ Official Gazette RS, no. 87/2001.

²⁵ Davey, K. 2011. Local Government in Critical Times: Policy for crisis, recovery and a sustainable future. Council of Europe, Strasbourg.

- Although the incentive purpose of local taxation should not be overlooked, it should not render impossible activities that are otherwise lawful. Any incentive should respect the **principle of the equality of citizens before the law**. In such cases, the determination of the tax base, taxation rate and exemptions should be consistent with the objective pursued.
- **Untimely changes** in the local tax framework that could cause excessive disruption to economic operators or households **should be avoided**.
- The local authority should provide the public with information and explanations concerning any taxes in addition to tax levied by a higher authority. If they are exclusive taxes, it is up to the municipality to draw up its fiscal regulations and bring them to the attention of the public.
- Local authorities should provide the public with comprehensive, **readable information about the use made of tax revenues** by the authority.
- In the case of exclusive local taxes, the authorities should pay particular attention:

- to ensuring that tax bands are both simple and fair;

 to the quality of the drafting of tax regulations, particularly in small municipalities;

- to tax avoidance and evasion mechanisms that may be prompted by local regulations.

- Information on the tax base should be regularly updated and founded on factors that do not lend themselves to contestation. Cooperation between local authority departments should be arranged in order to obtain the necessary information (police, registry of births, marriages and deaths, etc.). Cooperation with the higher authorities may enable local authorities to obtain the information needed to establish the tax base.
- The bulk of local taxation should rest on a relatively stable tax base;
- Payment demands should allow taxpayers to check the accuracy of the information on which the amount of tax payable is based: tax base, rate, any exemptions, etc. The procedure to be followed for lodging a complaint should also be clearly mentioned, as should the procedure for requesting easy payment terms in the case of a sizeable tax;
- Local authorities should carry out audits at regular intervals for each tax directly levied by the authority. Such audits should:

 – compare collection costs (and changes in such costs) with the proceeds from the tax; indicate whether, for example, all taxpayers have been identified and whether they all pay the tax;

- assess the incentive and discouraging role of any taxes that have such an objective.

An important action towards promoting RES was achieved by project LOCALI4GREEN members in Slovenia. Project members cooperated with Ministry for public administration when *Strategy for development of local self-government in Slovenia until 2020* was written.

Input from the pilot partners resulted in inclusion of regulatory impact assessment in the decision-making process on the local level.

The regulatory impact assessment promotes ex ante review of proposed legislation and how it will effect environment, society and economy. This will enable decision makers on the local level to make evidence based decisions on local policies, including fiscal policies promoting RES.