

Vrbas – A Role Model for Serbia

Radmilo Marković

How did two engineers, with the help of a local self-government, start from scratch and made a well-rounded system which cares for the public spending on energy; how much did they save in their municipality and the problems they faced.

Every good householder knows, at any time, day or night, what they own, the condition of their property and how much money they need for maintenance, how much they spend on heating, electricity, water, what needs urgent repairs and what could be postponed for better times, and so on. The state of Serbia, however, it has been apparent for decades, cannot call itself a good householder – it was a huge problem to count all the servants and, and let alone, the property it owns, how much it spends, and if there are potential savings, calculate if money and energy are being wasted etc.

Engineers Željko Zečević and Nikola Vujović were more than aware that in Vrbas, seven or eight years ago, the situation was quite similar. In their daily work at the Vrbas Land Development Agency¹, the whole time they were encountering the same problems: high public spending and wasting of energy in public buildings and public lighting, as well as poor maintenance. Since they were continuously facing the same problems, they came up with an idea: a system needs to be put in place to put order in the communal energy services. And so they started, from scratch. From one public building to the next, they have inspected all publicly owned buildings and every room within their walls – measuring them and listing all electricity consumers, every light bulb, every socket, every window. They've gathered all the necessary data using their own resources, their own phones and cars etc. All of this, whilst performing their regular duties in the Agency.

“Barely anyone realised what it is that we were doing and we worked almost semi-illegally. Almost no one knew we were doing it. This lasted for two or three years” explains Željko Zečević for Vreme.

For these two-three years, they have “manually” and with no compensation done the work that should be done by the state: listed and analysed what they found, all with the purpose of establishing an energy management system and introducing it to institutions. Concurrently with Nikola's and Željko's, pioneering efforts, the Municipality was in the process of adopting a Development Strategy for the period between 2010-2015². Energy management found its place in the Strategy thanks to the understanding of the municipal councillors and aldermen. In July 2011, the Energy Management Office³ was established, under the to the Land Development Agency.

¹ Ser. *Direkcija za izgradnju*.

² Ser. *Strategije razvoja za period 2010-2015*.

³ Ser. *Kancelarija za energetske menadžment (KEM)*.

“The Strategy was a turning point” says Nikola Vujović. “After that, we participated in the Exchange 3 project, for which we applied with the part of the goals set by the Strategy. The application was successful, together with two other municipalities-applicants, Kula and Bačka Palanka. Energy assessment of public buildings was conducted, a partial cadastre of street lighting was made, and many courses were held for key actors in the energy management process” he adds.

Things then went further. An energy efficiency programme and energy certification were added to existing energy management - they were amongst the first ones in the country to be certified as an organisation licensed to issue energy passports and they started offering their services commercially. Finally, the local municipality came to aid as well: termovision camera was acquired, a blower door which measures airtightness of buildings (to put it simply, it “feels the draft”), temperature recorders, recorders of exhaust fumes etc.

Milan Glušac, president of Vrbas Municipality says that he too received bewildered looks when he insisted that the Office is equipped with the necessary appliances. “The previous administration did not recognise the importance of the Office, and I too face much criticism, from my closest associates to start with, in my attempts to establish the Office and equip it”. The Municipality was in a difficult situation, the value of one and a half of our annual budget was spent in advance. Only for street lighting we have inherited a debt of over 30 million dinars. However, I pushed for it and claimed that it will all pay off. There were even times when people would say: why do you always keep talking of this energy efficiency? Such lack of understanding. Afterwards, they gave up”, says Milan Glušac for Vreme.

The persistence of the engineers, followed by support from the Municipality, finally paid off. The Office has assessed all public buildings, recorded the problems – woodwork, roofs, heating etc. After the listings, all the data was entered in a software, and an agreement was made with the management of all public buildings to report on their spending on energy and heating, and provide all other relevant data on a monthly basis. Now, the system is established and everything is “one click away” – what is being spent and what are the necessary steps to be taken. Nowadays, the institutions monitored by the Office, are calling the Office to enquire about data concerning their own objects. In 2015, the Office has received the ISO 50001 certificate for energy management system. Vrbas has thus become one of the few municipalities in Europe and the first and only one in Serbia to get certified to ISO.

At the same time, the Municipality has adopted a Decision on Improving Energy Efficiency. It is a unique decision of such sort in the country because, unlike other existing ones, it does focus only with improving energy efficiency of street lighting, but it goes more in depth—into the buildings. According to Vujović i Zečević, the Decision is “a tool, a filter, to ensure that no stupidities with inconceivable consequences are done for the future users of these objects – it prevents unqualified persons from making decisions about which energy source will be used, what kind of boiler, which windows, to decide if the building is to be remodelled etc. All of it is entrusted to the qualified individuals. We proudly point out that this Decision should be a role model for all municipalities. It is publically available, should anyone wish to take it and build on it, and suggest how we could improve it...”

Also, all street lights were marked, and the Municipality has, from its own means, amongst other things, changed all the lights in one of the villages in the Municipality. Combined lighting, high pressure sodium lights and LED, have led to 47 percent saving. And here we come to the key point in the story: what are the savings? According to engineers Vujović i Zečević, without significant public investment, mainly through energy management, changing habits, and monitoring, compared to the base year – 2009, public buildings saved 17 percent, that is, around ten million dinars.

“We are sorry that other municipalities in Serbia, or the Ministry, are not copying the system made here. We would like to see other municipalities, being able to say that they save 10 million annually. If Vrbas, with 25 000 inhabitants, can save ten million, imagine how much can be saved in Belgrade, Novi Sad, and in whole of Serbia. Unfortunately, the Ministry showed no interest. Provincial Secretariat for Energy⁴ came to visit, but no one from the Ministry” says Željko Zečević.

President of the Municipality, Mr Glušac, points out that the Municipality is at everyone’s disposal. “Whoever may be interested is welcome. I’ve offered other municipalities to come to visit, free of charge, to witness what is it all about for themselves. I saw that other municipal presidents have no such offices formed nor do they understand the issue. This has to be practiced in other municipalities as well, because it is for their own good, because they will achieve enormous savings – these funds could be used for other purposes, for sports, culture...”, says Mr Glušac, and adds that there is a wish to open a regional office, which could provide trainings for all of Serbia and the region, for everyone who may be interested.

And here we reach the problem. Municipality of Vrbas, together with three other municipalities received six million Swiss francs in donation, from SECO⁵, to improve energy efficiency of public buildings. It implies changing the doors and windows, facades, isolation – practically, a continuation of what the Office has long been doing. Apart from that, the intention was for these funds to be used to establish the regional centre, which is seen by Mr Glušac, Mr Zečević, and Mr Vujović as the next step, in essence – to “export” good ideas and practices to other municipalities. This proposal, however, was not approved by the Ministry, and Vrbas, despite unofficial announcements, received the same funds as other, more poorly marked municipalities.

To make things worse for the engineers in the Office, acting in line with the request made by the Ministry of Finance, in January 2016, Municipal Assembly of Vrbas has dissolved the Land Development Agency, because it was judged “unable to be successful in the market”, which was requested by the Ministry of Finance. The Office has then moved to the Municipal Administration, which meant that it no longer had right to offer services commercially. This deprived the Municipality of funds, earned by the Office by offering

⁴ Engl. Provincial Secretariat for Energy, Construction and Transport of the Autonomous Province of Vojvodina (Ser. *Pokrajinski sekretarijat za energetiku, građevinarstvo i saobraćaj*).

⁵ The State Secretariat for Economic Affairs, a division of the Swiss Federal Department of Economic Affairs, Education and Research.

services - from conducting studies and making energy passports to renting equipment. At the same time “as a reward”, the engineers’ salaries were cut down for one third, in line with other salaries in the Municipality. Now, the creators of the energy management system in Vrbas, receive a salary bellow the national average. They see the way forward in forming an agency or a company, or some other entity which will enable them to continue their work in the field of energy management, because moving back to the Municipal Administration also means having additional tasks which leaves them with not enough time for the Office. According to the Municipal President Mr Glušac, the Municipality is considering solutions that will enable the continuation of the successful practice that made Vrbas a leader in the field of energy management in Serbia.

Municipality and the Ministry, it’s your move.