Small HPPs in Serbia; Big potential, low usage, the report

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Around 120 to 200 million EUR is possible to be invested in the construction of small HPPs on 317 locations in 17 Serbian municipalities. It is a possibility for opening around 1000 new work places, at the same time.

Serbia, as naturally rich country, has a perspective for energy independence in the future. Having this on mind, Serbia can get 27% of total energy exactly from renewable energy sources until 2020.

In comparison, EPS produced 10,6 billion KWH in the first three months of this year while 15 million KWH is produced from renewable energy sources within 35 contracts.

The first public call for investing in small HPPs in 17 municipalities in Serbia expired at the end of last week. According to first estimations, the investors' interest is big.

Investing in small HPPs is interesting to domestic and foreign investors. Their construction has been reflected in pioneering attempts of individuals. Around 120 and 200 million EUR is possible to be invested in construction of small HPPs on 317 locations in 17 Serbian municipalities. It is a possibility of opening around 1000 new work places at the same time.

Total capacity of those HPPs is around 110 MW and they are planned to start working until 2015 i.e. 2016 the latest and to produce about 400 GWH of electricity on annual plan. Only the safest locations in Serbia were chosen in the scope of this public call.

The of interested investors and the most popular locations will be known more precisely in the next couple of days.

There are 950 locations in the country where small HPPs are possible to be constructed and only 19 of them are launched so far. Small HPPs are possible to be constructed on 54 locations in some municipalities as for example in Tutin and 23 in Kraljevo- it is announced from the Ministry of Energy and Environmental Protection earlier.

Chance and motivation

It is very important that Serbian Government called investors to invest in renewable energy sources for the first time completely transparent what practically stopped former practice of internal and closed agreements with chosen investors.

All interested investors will have six months' deadline to declare about investments. Approvals will be issued for objects with power up to 1 MW and energy permissions will be issued for objects with capacity higher than 1MW. According to some estimations, one to two million EUR are required for the construction of 1 MW small HPPs.

According to valid orders for stimulating tariffs for electricity production from renewable energy sources, stimulating measures of 7,38 and 13,72 are predicted for small HPPs.

The time of stimulating tariffs' duration is 12 years and amounts of stimulating measures will be harmonized with inflation amount in euro zone once a year.

All indicates that Serbia is finally made a new legal frame that enables good business in the area of renewable energy sources. There is no doubt that enforcement of legal frame for work in the area of renewable energy sources is guaranty for safe business for domestic and foreign investors at the same time. Many things remain to be done in order not to keep legal frame only as a dead letter on the paper or the only thing done in this plan.

Therefore, shortening of endlessly long bureaucratic procedure for issuing necessary construction, energy and other permissions has to be well planned and done. Office for faster agreements is also announced from Ministry of Resources. This office will help investors do decrease number of required permissions from current 27 to 5.

This is very important to be done, considering that many EU countries want to invest in renewable energy sources in Serbia where Serbia and its citizens.

Potential

As consciousness about pollution and its effects grew, people started to think about acceptable and less acceptable ways of electricity production. All that in production process that considers emission of carbon-dioxide and other greenhouse gases is undesirable in ecological sense.

Potential of cities and municipalities in Serbia for renewable energy sources is big and investing in this area increases industrial growth, employment and tax income and modern technology transfer is enabled.

More serious thinking about small HPPs in Serbia potential use started at the end of 80s of the last century, more precisely in 1987 when Energoprojekt and Institute Jarosav Cerni did a little cadastre of small HPPs in Serbia. This document showed meaningful energy potential Serbia has in little water streams.

However, Yugoslavia's breakdown and log-term isolation of Serbia disabled more significant use of this potential and made big delay of Serbia with reference to developed countries as well as countries in region.

According to data from cadastre, Serbia has potential for construction of little less than 900 small facilities with 100 KW to 10 MW power i.e. 500 MW in total. this means that using a potential from small rivers can produce 1.600 GWH of electricity or 400.000 tons of equivalent oil yearly. It is estimated that 1000 EUR per KWH is required in average so the construction of these objects can attract investments of almost half a million EUR.

It is necessary to refresh and form the new base for locations where small HPPs can be built because detailed research wasn't done for existing cadastre from 1987.

American institute Jefferson did a research in the scope of the project about potentials from Serbia for construction of small HPPs and according to this research total potential of renewable energy sources in our country can settle about a fourth of energy needs.

Despite incredible nature potentials, usage of renewable energy sources in Serbia is developing and it is far from necessary required tempo and intensity of growth and development. Serbia is obligated to harmonize energy policy and to determine goals for participation in total production of electricity in process of EU accession. This percentage should be 27 percent by 2020 what is considered as a great challenge in the following period.

Current energy participation from renewable energy sources in Serbia is around 6% including big HPPs and it is predicted to remain stable until 2015. Strategy of energy development until 2015 predicts total participation of renewable sources (without HPPs) in total primary energy consumption to be increased from 0 to 1,1% in 2015 while participation in final consumption of energy should be increased to 1,5-2%.

Small HPPs in Serbia

Policy of electricity industry development was shortly directed to research of small HPPs after The World War II. Certain number of small HPPs was constructed during this short period and then the researches of small water streams were neglected for the purpose of small HPPs' construction and replaced with construction of big water systems like Djerdap, Bajina Basta and other...

According to available data, 10 plants of those small HPPs constructed after the war with installed power in span of 10 to 8800 KW are out of operation.

Positive example is that the first small HPP in Serbia is "Sveta Petka" constructed on Nisava

River 100 years ago and it is still in operation.

Usage of renewable energy sources is one of the priorities of Strategy of energy development in Serbia until 2015.

Increased usage of renewable sources will engage domestic capital and stimulate smaller, medium companies and domestic equipment production to use these energy sources. Domestic industry would participate in offers of foreign companies for investing in energy sources what would increased possibilities for employment of local population from village areas where the biggest potentials of this energy are placed.

Considering that the state is the owner of natural resources, it depends on the state how these potentials are going to be used.

Obligation of the state is to enable and facilitate private capital to include in construction of small HPPs.

While oil represents black gold for some states, water is white gold to Serbia which must be saved and used in a right way.

Source;Serbia Energy/MERZ/Akter