

Feed-in Tariffs Kosovo

Dr. Sc. BLERIM REXHA, Faculty of Electrical and Computer Engineering, University of Prishtina

Dr. Sc. BEDRI DRAGUSHA, Mechanical Engineering Faculty, University of Prishtina

Dr. Sc. ILIR LIMANI, Faculty of Electrical and Computer Engineering, University of Prishtina

Kodra e Diellit pn., 10000 Prishtina

REPUBLIC OF KOSOVO

bedridragusha@gmail.com; blerim.rexha@fiek.uni-pr.edu; ilir.limani@fiek.uni-pr.edu

www.uni-pr.edu

Abstract: - In this paper is presented the possibility of using the renewable energy resources and promoting the renewable energy resources (RER) by feed-in tariff schema. ‘Feed-in’ tariff is a description of a policy, a “tariff” used to purchase RER generated energy that is “fed” into or sold to the grid. Usually the price depends from the technology used such as wind, water, biomass, geothermal, etc. The Feed-in tariff is becoming the key policy tool used to shift the world’s energy mix away from fossil fuels to renewable energies to address energy security of supply, climate change, and economic growth. Advantages of generation electricity from renewable resources are widely accepted even the technologies used are not economically competitive with conventional technologies.

Key-words: Feed-in Tariffs, Energy, Wind, Water, Biomass, European Directive, Clean Environmental, CO₂.

1 Introduction

Kosovo is a relatively rich country with renewable energy resources, including the potential for biomass in form of wood, as well as water, solar energy, wind energy, biomass from waste, solid waste and geothermal energy. The prefeasibility study has been done for a part of energy hydro-potentials, and in 2008 assessment was done for solar energy, wind, biomass and geothermal energy potentials. It is also completed the identification and preliminary assessment of all small, yet important, hydro-power plants which are available for Kosovo. With the aim of promoting the use of RER, is contracted the implementation of projects for the use solar energy for heating of sanitary water in the University Clinical Center of Kosovo and in the Students Center in Prishtina.

It is adopted a decision for the incentive measures for the development of RER

(renewable energy resources). For the implementation of this decision, the Energy Regulators Office (ERO) has adopted the feed-in tariffs, an incentive schema for the generation of energy from small hydropower plants and wind. ERO supported by World Bank project is establishing the regulatory framework for the development of renewable energy resources, including the Feed-in tariffs for all types of RER.

Feed-in tariffs should reflect possible electricity price increases, as result of inflation, or possible (but significant) impact of other relevant factors. Application of ‘feed-in’ tariffs is usually accompanied with a suitable system of certification of the origin of electricity sold/purchased with these tariffs. It is important that ‘feed-in’ tariffs are set so that they attract private investors, and for banks to fund RER investments. In EU countries, RER energy

investors/purchasers are looking towards countries with the highest tariff rates. It is also important creation of the framework (as started in EU) for using the Photovoltaic Technology in combination with other renewable energies, as a suitable and cost effective option to provide

2 Why incentives for Renewable Energy Resources

Development of RER requires a series of incentives, because their technologies cannot compete in the energy market with conventional technologies of energy generation. However, it must be stressed that part of RER technologies are increasingly cheaper. This is the main reason why incentives are required.

RER incentives can be summarized in two categories: (i) fiscal, and (ii) regulative. The former mainly relates with the prices of RER energy sold and fiscal facilitations for their technologies; and the latter is mainly linked with facilitations for the construction of the RER generation, conditions of their connection to the energy grid (when they ask to be connected), and also guarantees of contracts of energy trades, at least in the investment write-off period.

RER incentives are provided for some time by EU countries, USA, Canada, etc. We must stress

3 Obligations for the use of Renewable Energy Resources in Kosovo

According to the provisions of the Energy Community Treaty (ECT), Kosovo is committed to increase the amount of energy generated from renewable resources in its generation portfolio. It is clear that the increase of the amount of energy generated from renewable resources is important for Kosovo in the aspect of diversification of energy resources and almost full dependence from lignite combustion generation capacities (98%). In order to achieve these indicative targets, the energy sector has initiated the approval of incentive tariffs (feed-in

sustainable access to electricity in the developing world and to help fight poverty and climate change. Stand-alone Photovoltaic systems have been confirmed as an appropriate option for bringing electricity to scattered households.

out, that the RER incentives package has to be adjusted according to the conditions of each applying country, but best design models are already tested in the western world. Hence, in Kosovo, we don't have to invent a new approach, but rather to apply what is most suitable for our conditions, always in line with our applicable laws and European approach.

European experiences in supporting and encouraging RER development has evolved in time. Mechanisms used for their support can be grouped as follows:

- Fixed tariffs, also called 'feed-in' tariffs;
- Mandatory quotes – (green) Certificates;
- Subsidies for a part of capital investments;
- Tax reduction, and
- Bidding of a mandatory amount of energy deriving from RER.

tariffs) for the use of RER, and in the near future will create a system for green certificates.

The accomplishment of forecasts for energy generation from RER is a long-term objective which also relates to the fulfillment of the ECT obligations and the Kosovo process of European integration. Increase of the use of RER will contribute to the realization of three objectives of the country's energy policy: support for the overall economic growth; increase of the security of supply; and, environment protection. Completion of the legal and regulatory framework for RER shall include the further harmonization with respective European directives and the adoption of the Law on

Energy Efficiency, which also addresses RER from the standpoint of institutional and financial support for their development. Therefore Kosovo is required the implementation of the EU planned objectives 20-20-20 for energy; meaning that by 2020, there has to be:

1. Reduction of green gas emissions by 20%;
2. Increase of renewable energy resources participation in the energy consumption to 20%, and

3. Improvement of energy efficiency by 20%.

Support for the achievement of these objectives in the long term should be programmed starting today. The support shall consist of a package of incentives in line with the European approach and best global practices

4 Regional and European experiences with feed-in tariffs

Incentive mechanisms in EU member states differ significantly from one country to another [4]. In many countries, along with the main support schemes, such as ‘feed-in’ tariffs or

‘green quotas and certificates’ there are also other mechanisms. A visual presentation of incentives utilized in EU member states shows that predominantly they make use of ‘feed-in tariffs’ (also known as fixed tariffs), as presented in Figure 1.

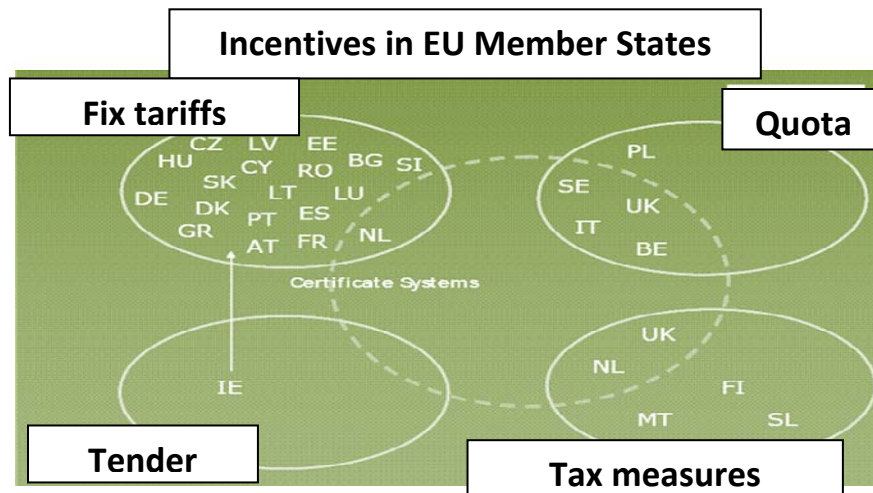


Figure 1: Incentives in EU member states

Kosovo is preparing and has presented a concrete plan for implementing the requirements of the Directive 2001/77/EC approved by the European Parliament and the Council on promotion of electricity produced from renewable energy resources for the internal (EU) market.

Croatia is a non-EU state where policies for promotion of RER and co-generation are significantly advanced, compared to other

countries of the region. As noted above, ‘feed-in’ tariffs are simple to apply from an administrative viewpoint. They provide the investors with income guarantees from the project as well as an opportunity to relatively simply calculate the feasibility of investment projects in utilizing RER. Also, they provide financial institutions with means to directly assess gains from these projects and possibilities for loan return.

Usually, RER investments are accompanied by multi-year power purchase agreements (PPA) for electricity produced by them. This is another rather important incentive for this sort of investments. The PPAs are rather significant for

the countries where the electricity market is under development.

A relevant summary of relevant experiences of certain EU member states and countries of the region on renewable resources incentives is provided in Table 1.

No.	Country	Incentive				Note
		Uniform fix tariffs	Long-term contracts	Concession (highest economic rent)	Quota obligation	
1	Germany	Yes				Fixed tariffs set by the Government
2	Italy, UK, Sweden				Yes	Marginal price in the electricity market
3	Ireland	Yes	Yes	Yes	Since end-2007	e.g. tariffs +35% incentive, set by the Government
4	Macedonia	Yes	Yes	Yes		Supported by WB; Fixed tariffs set by the Government
5	Albania	Yes	Yes	Yes		Supported by KfW

Table 1: Experiences in EU countries

It should be noted that the surrounding countries, such as Macedonia and Montenegro and Albania apply an open concession awarding process for the utilization of small hydro potentials by private investors. This is done in an effort to achieve a rational use of these resources.

Macedonia and Montenegro have determined the main criterion for selection of private investors

5 Kosovo's experience with feed-in tariffs

The indicative targets for electricity production and thermal energy consumption for energy generated from renewable energy resources and co-generation have been set. In Kosovo this is obligation of market policy maker, i.e. the

- unified for each resource and plant-size category;

to construct small hydro power plants to be the highest "economic rent" for the budgets of the countries. This criterion practically eliminates the 'un-merited' subsidy that the 'feed-in tariffs' can provide to investors, thus providing the investors with benefits according to concrete conditions of the local energy market. This approach is also to be applied in Kosovo.

Ministry of Energy. Full package of incentivizing mechanisms for application of these targets will be indentified soon and become compulsory. The setting of indicative targets and prices will achieve the following:

- Electricity purchase prices for electricity generators from renewable resources and co-generation shall be
- Prices for energy generated through RER and ECG shall be determined;

- The prices shall be incentivized aiming to attract private investments for accomplishing RER indicative targets.

Already approved ‘feed-in’ tariffs for energy generated from small hydro power-plants and wind are as follows:

HPP Capacity	Price (cent/kWh)
Hydro Power Plants up to 2 MW	6.70
Hydro Power Plants between 2 MW and 5 MW	5.90
Hydro Power Plants between 5 MW and 10 MW	5.60

Table 2. Feed-in tariffs small Hydro Power Plants

Whereas, the feed-in tariffs for energy produced from wind are as follows:

Incentivized tariffs (feed-in)	Price (cent/MWh)
All generators using new technology	84.00

Table 3. Feed-in tariffs Wind

6 Conclusion

Feed-in tariffs comprise a stimulating mechanism for investments in the energy sector. In the future this mechanism will be accompanied with the application of other incentivizing mechanisms for successful development of RER in our country.

‘Feed-in’ tariffs have resulted particularly successful in the stimulation of electricity generation from hydro and wind energy. It is simple for application and is not associated with

complex energy trade agreements. Feed-in tariffs should be different for different technologies (wind, water, solar, biomass, etc.), and often is different for various sizes of generation plants within one single technology. These tariffs are the most preferred mechanism of the European Commission (EC) as noted in the EC Plan for the increase of energy consumption from RER and CO₂ emission reduction by 2025.

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