



27 November 2008

Review of the Feed-in Tariff on wind-generated
Electric Energy
CONSULTATION PAPER

DISCLAIMER

This consultation paper has been prepared by ERO intent to incite comments and opinions from shareholders. This document should not be considered as to represent an ERO Decision.

Content:

Introduction..... 3

Fulfillment of indicative targets..... **Error! Bookmark not defined.**

Feed-in Tariff and methodologies applied by various countries **Error! Bookmark not defined.**

Feed-in tariff proposed by ERO for wind-generated energy.....6

Introduction

This consultation paper has been prepared by ERO intent to set the feed-in tariffs for wind-generated energy. The prevailing legal provisions require the fulfillment of indicative targets, fulfillment of energy demand from renewable sources and generation of green energy in order to meet the obligations deriving from direction 2001/77/EC which is a requirement of the Energy Community Treaty as well.

ERO in cooperation with MEM and other subjects that support the promotion of the renewable sources shall prepare the legal and regulatory grounds in order to stimulate the private investors to invest in renewable sources and market opening.

ERO's mandate for determining of the feed-in tariff on renewable sources is based upon:

- Authority granted by “Energy Regulatory Law” 2004/9- Sections – 15.4 (a) and 46.2 (amended by law no. 03/L-080)
- From the provisions of “ Law on Energy” 2004/8
- In conformity with the Administrative Instructions No. 06/2007 “ On indicative targets on Electric energy and Heating consumption from Renewable Sources and Co-generation”, and
- Sec.5 of the Kosova Government Decision on “Stimulation Measures for electric energy generation from the renewable sources and electric energy sources from co-generation in Kosova for the period 2007-2013”.
- Fulfillment of obligations towards directive 2001/77/EC of the Energy Community Treaty.

ERO Proposals are preliminary and this consultation paper have been published as a possibility for the interested shareholders that present their comments, before ERO takes decision on the approved tariffs. The proposed tariffs are temporary and intentional and may be subject to further deliberations.

The last deadline for accepting comments on this consultation report is 15 days since the date of publication in the ERO official web-page and all the interested shareholders have the right to present their comments.

Comments should be prepared in written. Electronic format is preferred. The comments presented by email should be sent in the electronic address ero.pricing-tariffs@ero-ks.org with the highlighted paragraph in the subject line “Feed-in tariffs- Consultation paper-Comments”.

The hard copies should be submitted to ERO office situated in Hamdi Mramori , Nr 1, 10000, Prishtine addressed to “ Pricing and Tariff Department “.

Measures and policies of the countries in the region and EU countries relative to promotion and support of the renewable sources are “feed-in tariffs, generation certificates, quotes for the renewable energy, taxes in carbon emissions (CO2), gas emission trading, capital grants and tax stimulations. Two mechanisms into which the EU countries rely are feed-in tariffs and quoting system. Feed-in tariffs guarantee the generators a fixed price for each unit of energy produced from renewable sources for a set number of years; this naturally has budgetary implication for the final customer.

The quoting system is based on the selection and implementation of a minimal electric energy quantity generated by renewable sources (RS) as a legal requirement. In EU, the feed-in tariffs are considered more successful then the quoting systems therefore Kosova shall practice the same approach.

Due to lacking of feasibility studies and evaluations of RS from wind potentials, ERO has chosen the comparative system “benchmark” in order to set the wind generated energy tariffs, where the countries of the region and EU have been taken as references.

Fulfillment of Indicative targets.

The amount of consumption from renewable energy until 2016 is determined in the document “Administrative Direction. No. 06/2007 on indicative targets for consumption of Electric Energy and Heating from the Renewable sources and co-generation”, issued from the Ministry of Energy and Mines. These indicative targets may be seen in table 1:

No.	Energy Sources	Indicative targets for energy generated from renewable sources									
		(GWh)									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	Hydro	125.84	134.56	145.03	156.31	167.01	178.40	190.50	203.18	216.67	230.39
2	Wind	0.00	0.00	0.00	32.56	68.73	108.51	151.86	199.80	252.14	309.94
3	Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Biomass	0.00	0.00	0.00	0.00	11.63	17.45	19.77	23.26	29.08	29.08
	TOTAL	125.84	134.56	145.03	188.87	247.37	304.36	362.16	426.24	497.88	569.40

Table 1

Following the document in question, starting from 2010 is foreseen a consumption of 32.56 GWh/year of wind generated electric energy, a consumption that reaches 309.94 GWh in 2016

Feed-in tariffs and methodologies applied by other countries.

In the following table are indicated the final tariffs of the wind energy in some countries that have made a significant progress in the energy generation from renewable sources, exclusively the wind generation energy. The most applicable methodologies are:

- Tariff break-down according to technology
- Tariff break down according to the installed capacity
- Fixed tariff for all wind energy generators
- Tariff break down according to the generated Energy

Country	Condition	Tariff
Bulgaria	Electric energy generated by wind electric-plants. Capacity up to 10MW	61.68 €/MWh
	Electric energy generated by wind electric-plants, new technology manufactured after 2006:	
	a) Wind generators with up to 2550 hours of efficient annual labor	89.95 €/MWh
	b) Wind generators with over 2550 hours of efficient annual labor	80.19 €/MWh
Lithuania	Fixed tariff	64 €/MWh
Macedonia	Fixed tariff	89 €/MWh
Slovenia	Fixed tariff – Installed capacity up to 1MW	90 €/MWh
	Fixed tariff - Installed capacity over 1MW	87 €/MWh
France	Capacity factor 23% (guarantee for the first 5 years)	84 €/MWh
	After 5 first years if the capacity factor reaches 30%	60 €/MWh
	After 5 first years if the capacity factor reaches 41%	30€/MWh
Germany	60% of the projected generation	80.20 €/MWh
	100% of the projected generation, after 15 years	50.70 €/MWh
	150% of the projected generation, after 5 years	50.70 €/MWh
Croatia	Fixed tariff	90 €/MWh

The fixed tariff has been applied in Macedonia, Lithuania and Croatia. Initially it has been a method applied in Germany as well, as a set percentage to retail tariff. This is a simple and easy methodology to be applied, although in France it has caused the “wind-rush” problem that implies that first investments are made in the areas that are “richest” with wind. The result is that the best locations are equipped with a more obsolete technology thus resulting in “wind ghettos”. The latter often results in the “NIMBY” effect (Not In My Back Yard). Nonetheless, the “wind rush” effect may be less evident in smaller countries like Croatia, Macedonia and Kosova since the geographic areas does not enable a larger diversity of the wind resources as may be the case in Germany and France. Therefore, the most adequate method to be applied in Kosova is the one of the fixed tariff as the neighboring countries have applied.

The Feed-in tariffs proposed by ERO for the wind generated energy

The feed-in tariff for the newly technology wind generated electric energy has been calculated from the average of the neighboring countries that implement the fixed method including Croatia, Macedonia, Slovenia and Lithuania.

The resulting tariff has been displayed in the following table and applies to all new technology generators.

<i>Feed-in Tariffs</i>	<i>Price (euro/MWh)</i>
All new technology generators	84.00