

## BIOMASS SUPPORT IN MACEDONIA – ON THE RIGHT TRACK?

AUGUST 2013

**B**iomass, a renewable source of energy, eligible both for electricity and heat generation is being promoted and supported in the past few years in Macedonia. In fact, as the country's EU driven agenda in the energy area develops, Macedonia has planned to increase the use of renewables to reach 21% of the final energy consumption by 2020 according to the Renewable energy strategy from 2010, in which biomass plays an important role with approximately 40% of the mentioned projected renewable share. The current utilization of biomass is also high representing 9,5% of

the spent final energy and 59% of renewables (data for 2005), but more important is its use for heating purposes since the statistical data tell us that biomass is the source of heating for 430 000 households (76%); its unused potential especially for heat generation is also estimated to be significant. Both from policy point of view – reaching the renewable share and from environmental and economic point of view – increasing the utilization of clean energy and having big potential as source of heating, the support policies directed towards biomass are to be carefully analyzed especially when the existing

analyticamk.org



ones have given no tangible results.

In line with the country's mentioned Renewable energy strategy, feed-in tariffs, subsidies for support of electricity production from renewables, were introduced in 2007 to support the increase of the share of renewables in order to contribute to reaching the envisaged renewable energy target. More specifically among the eligible renewable sources for feed-in tariffs inter alia are biogas produced from biomass introduced in 2007 and biomass introduced in 2010. In the meantime the feed-in tariff policy has been changed several times and the changes addressing biomass first occurred in 2010 when the feed-in tariff for biogas produced from biomass was increased, but the period for using the feed-in tariff was shortened. The last corrections took place in 2013 when both feed-in tariffs for biomass and biogas were increased. These attempts of increasing the biomass related feed-in tariff is surely result of the missing interest in producing electricity from biomass. This statement is supported by simply looking at the Energy Agency's website list of preferential producers of electricity (producers of electricity from renewables which utilize the feed-in tariff) as well as the register

of utilities for producing electricity from renewables (the latter last amended July 2013). Both of those lists contain neither biomass nor biogas producers, i.e. utilities, but on the other side there is lot of interest shown for photovoltaics and small hydro power plants. Experts say that the lack of sufficient knowledge of the technology or the fact that this technology needs to be imported are possible barriers to the interest in biomass as source for electricity production, despite that the feed-in tariffs are increasing for this renewable energy source.

On the other hand, there is no heat focused support for biomass, although its use in this manner is more popular and has bigger potential. It is important to underline that generally the renewable energy support in Macedonia is predominately directed towards producing electricity; heat generation with few exceptions is not given much attention, although it is widely known that the Macedonian heat market is usually a problematic domain. The heat market is in fact characterized with energy wasting, inefficient heat services while most of the consumers are energy poor. However, there is potential in the agriculture sector for utilizing biomass for heating

purposes by using the agriculture residues although for now no support has been given for this. Important to underline in this context is that not all types of biomass are eligible for the feed-in tariff – firewood is excluded (other types of biomass are residues from agriculture, from industries etc.) and this is in fact the type of biomass mostly used for heating (80% of the biomass used in Macedonia is the firewood type). The use of firewood is also connected with the known problem of deforestation and its use for heating purposes is usually done inefficiently (if used in old heating stoves, is less caloric than pellets – biomass from wood industry residues, it is often gathered as result of illegal wood cuts etc.).

The presented facts suggest policy solutions in two directions: one is the biomass support policies to be directed towards heat production also, not only towards electricity production especially related to non-firewood biomass addressing most likely the agriculture sector. There are obviously large underused quantities of agriculture and industry residues as stated in the above mentioned Strategy, which can be

used also for heating purposes. This can be addressed by offering local funds for technologies and know-how on utilizing heat from biomass from agriculture waste, which is also important for the development of the local rural communities.

The second policy suggestion is the need to shift away from firewood and try to focus on increasing the utilization of other types of biomass, especially targeting the potential interested sectors as agriculture, wood industry, communal waste sector with small local funds, promotional material etc. This can be the basis for opening new local job posts and increasing local employment while contributing to the overall local economic development. In such way, the “real” biomass will be increased and promoted, local heat solutions will emerge and the usually wasted biomass will be utilized for energy purposes, ultimately contributing towards reaching the country’s renewable share in a sustainable way.

Written by: Ana Stojilovska,  
Research Fellow on the Energy and Infrastructure Program  
[astojilovska@analyticamk.org](mailto:astojilovska@analyticamk.org)