Bosnia and Herzegovina consists of two entities: the Federation of Bosnia and Herzegovina and Republika Srpska and in both entities the electricity is mostly produced in coal fired power plants and large hydropower plants, while recently there is an increasing interest in development of SHPP. Since 2015, small production capacities from renewable energy sources have been developed.

Although electricity consumption was stable in the previous period, its increase is expected by 2020. Therefore, the country plans to significantly increase electricity generation from fossil fuels. However, according to data from Eurostat 2014, Bosnia and Herzegovina has reached the target of 42.3 percent share of electricity production from renewable sources, which exceeded the target given for the period up to 2020. This happened because of biomass data review, with a remark that the analysis started from the assumption that the share of renewable energy in 2013 amounted to 34.9 percent.

In the previous period there has been a growing interest in the development of solar and wind power capacities. The high price of solar PV systems has led to the fact that application for support in the implementation of such projects is greater than expected. Around 35MW of small scale projects have been registered and their implementation is currently underway, while 7MW has already been constructed in BiH. In addition, 2.12MW of solar capacity got preliminary PPA, and 3.46MW final PPA.

Only 0.3MW of wind capacities have been constructed in BiH by the end of 2015. The wind farm near Mostar of 50 MW capacity is under construction and should have been completed during 2016. The construction of two wind farms of the same capacity is planned in Republika Srpska, one of which would be constructed by a private investor, while the other would be state-owned company and the funds are currently being negotiated with KfW bank. According to official data, projects for the production of additional 600 MW of wind energy are at the early stage of development. However, most of them were registered in the period from 2011 to 2013, and since then no progress has been made in the implementation.

The potential of renewable energy sources in terms of cost-competitiveness:

In addition to hydro potential, BiH has significant potential of solar energy and wind energy, and the amount of biomass is not insignificant, although it is planned that it is mostly used for heating. The northern part of Republika Srpska has significant geothermal capacities whose exploitation is not profitable at the moment, because they have relatively low temperature.

Hydropower is still the cheapest option of renewable energy in BiH. However, there are several areas where wind could be used at a relatively low price of EUR 50/MWh.

Investment framework for renewable energy:

In the Federation, RS and Brcko District there are three state energy companies, without common goals and plans. In addition, the procedures for obtaining permits are not harmonized; therefore it is difficult to predict how long an administrative procedure would last. In some entities even for small scale projects it takes a year to get all necessary licenses. As for the large scale projects that include multiple levels of authorities, the situation is even more complicated, and foreign investors are generally not interested, which means that most of investments are realized by state-owned companies.
The support system in BiH includes FIT in the Federation and the combination of FIT and FIP (feed-in-premiums) in Republika Srpska. It works for all technologies, but between the entities there are significant differences in capacities, the level of tariffs and the duration of the support. There have been discussions on the necessary changes that would be related to price reduction, because the FIT / FIP tariffs in BiH are the highest in the region.
It was noted that the PPA in BiH is not reliable enough in order to secure loans from banks, which is especially reflected to large scale projects. In the Federation the project first gets the preliminary approval for FIT and then, when completed – the final PPA. However, the primary legislation does not specify in which period it should be completed from the moment investor files for all the necessary documentation. It is expensive and exposes investors to high risk. Frequent changes in the legal framework present additional difficulties.
Measuring scheme was introduced in BiH with the Law on the Use of Renewable Energy Sources and Efficient Cogeneration adopted in 2013. For the plants of up to 50MW the two-way operation is allowed, and it is allowed for the producer to use the produced electricity on the site. However, due to concerns about the taxes raised by the competent authorities in RS, the development on measurement in this entity is at a standstill. Given that the price of electricity in BiH is relatively low, it takes a long time to pay off for all investments of this type.