

The most important aspects of legal assessment on the electricity generation capacity development in Albania.

Regional Targets and Biding Obligations

Albania is at a pivotal moment in deciding its optimal strategy for the development of the energy sector. The country, within the framework of the Western Balkans region adopted in 2012, has a near-term renewable energy target of 38% by 2020, and it is well aligned with EU commitments for 2030. Furthermore, the creation of a regional market was followed by a road map signed by the Paris Sustainability Charter, in July 4 2016. However, all the above do not imply any condition or/and choices about the resources to be deployed, the support measures to be adapted, or other similar aspects related with investments.

Statistical Findings on Demand Request and Investments

Aside from the above efforts, the share of renewable sources in gross final energy consumption, according to most recent data available by Eurostat, reveals that the country is keeping path with its indicative target, reaching 34.9% in 2015. Renewables have started to take off in good portion, even facing the problem that they are entirely concentrated in hydropower, except for a few single and individual small projects, such as the Urban Waste Processing Plant of Elbasan of 2.85 MW, the Photovoltaic Central of Korça of 1 MW, etc. In 2016, the available electricity request was at the level of 7094 GWh and during the first semester of 2017 it increased by 5.0% (INSTAT, August 2017). Future projections show an intensive growth of demand, which according to base scenarios of the ERE is predicted to grow by 1,5% and based on the regional study Sled SEE 2016, by 3%, foreseeing an peak of the level of demand among the 10,8 TWh - 13 TWh in 2030.

Hydropower Policy, a failure or success in Albania?

Hydropower regimes in the European Union, including the Balkan EU Member States, reveals considerable discrepancies among granting rights, based mostly on simple permits and in few cases, licenses. A heterogeneous situation exists in the WBs, with most of the granting through authorizations for small Hydro Power Plants being not of particular interest to foreigner investors and related to the bigger and the most important projects, the model of Public Private Partnership is being used.

The above partnership was offered by Albanian authorities to give a particular boost to investments, mitigating the impact of variables occurring at the time, through: (i) the free negotiation of provisions governing the contract, with accepting financial modelling by internal return rate at 16-22%; (ii) the guaranteed intake of all the power generated with Power Purchase Agreements based on the “feed-in” model for a period of 15 years; (iii) assuring and facilitating the granting of permits (up to 20 needed), through the projects’

consideration as an co-responsibility among the private and public authorities. Today more than 96 companies have applied to install 139 small and medium size HPPs for a total capacity at 561 MW (Ere Report, 2017).

However, there is still a significant undeveloped potential with a lowest LCOE compared to European countries, which means that hydro generation, according to the most ambitious scenarios, will double by 2030. There are already more than 2100 MW (2015) granted and still to be developed, of which up to 15 MW with a PPA need to be completed within 2020 (to preserve the PPA!).

There are already ongoing cancellations, mainly due to environmental or social concerns (e.g. HPP Pocem, SHPP Bushtrica 4, etc.), construction delays (e.g. HPP Shala, and Kalivaç), even lack of concessionary payment fees (e.g. SHPP Korsel), etc. There are also new calls on capacity (e.g. HPP Shala, and Kalivaç, etc.), as well as projects with prepared feasibility studies such as the case of HPP Skavica, leading up the decision on investments taken in WB6 Summit in Trieste (12 July 2017).

A Revolution Begins for Photovoltaics Deployment!

Hydropower plays a dominant role in the region and Albania leads these countries, relying almost exclusively on hydropower (and imports). This poses a challenge in dry years, like 2017, with imports of electricity rising rapidly (which could peak up historically at 60%). This, on the other hand raises security of supply concerns for the country, aspects that all together made necessary a drift of the paradigm toward a diversification for the protecting of the environment. The choice of PV is the most logical and emphasized by the perfect match that the periods with lack of rains are compensated by more radiation: Albania has on average 240-300 sunny days per year, which translate to solar energy production of 1500-1800 kWh/m²/a.

Then, there is the need to reduce dependence on hydro as the rapid falling technology costs of PV have led to a favourable provision introduced with the new RES Law 7/2017, which through diverse procedures, led to: (i) From the mid-spring of 2017, self-consumption through NetMeeting was introduced for households and companies up to 500kV, granted through a simplified permission procedure (taking around 30 days); (ii) On May 2017, the MoU among MIE-EBRD, span the way to the government decision to guarantee the purchase of electricity with PPA by 100 €/MWh, granted thought an authorisation procedure for up to 2MW of total capacity, among 50-100 MW.

Finally, EBRD and the Energy Community Secretariat signed on 9 June 2017 a MoU with the goal of “revolutionizing” the entire energy sector of Albania. EBRD aims to lead to the development and implementing of a framework for the allocation of one or two big

international bid rounds, for a capacity up to 700 MW (minimum 500 mil/€) in 2020. Based on the MoU, the Ministry of Industry and Energy has to review the legal framework, and EBRD to set up the auction mechanism for large-scale PV plants.

New Projections for Conventional Power Plants

To cope with the above extensive planned RES capacity, the need to balance the volatile system has increased and makes feasible to start looking at natural gas not only as a back-up reserve (already installed in Valona CCGT, 97 MW) but also for the proper development of a real capacity market. In fact, MIE (through Albpetrol) has already pre-agreed on a yearly capacity of around 0.3 bcm of natural gas from TAP pipeline, while there are plans for CCGT Vlora II and III, respectively 120 MW and 160 MW, to come online in 2020 and 2025.

Then, based to the most updated analyses offered by the Albania Gas Master Plan 2017, the decrease of fuel costs, predicts the total rate of penetration of the potential thermal demand in Albania to 1.5 bcm by 2020 and to 3 bcm by 2040. GMP foresees realistically that with economic optimization, future natural gas consumption for electricity generation will be at the level of 770 mcm by 2040. Regarding the legal form of engagements, the outcome of the feasibility study on regulatory and market analysis, taken with the support of IFC, on the IPP CCGT Korça 500 MW, is still expected.

Forecast on Future Scenarios by ACERC

While conscious that the analyses of the legal framework, even when integrated with best practices, can not reveal the future, the following three main assessments could still be drawn:

- Due to budget restrictions and limits on expenditure, in accordance with IFI's, the entry of any public capital in the energy sector is not foreseen (except made by security reasons, such as for the development together with Kosovo of the HPP Skavica and Zhur above 600 MW). The public policy is guided by cost estimation to get the less economic impact for the public budget and the reduce burdens for each consumer in Albania.
- Then, the most probable energy mix production of electricity in Albanian has to be based mostly on hydro power, an important portion of photovoltaics and a small portion of natural gas. Notwithstanding, as in the past the assistance of IFI's will not be missed, the "fear" is that the private and public sector will not be fully able to take advantage of all this potential, but on the contrary, as experience has often shown, there is the risk from the complexity of institutional and organisational framework, with a lot of delays in the ongoing streamline of projects.
- However, the experience up to now, makes possible some type of change, especially if

there will be a particular care for the improvement and simplification of the investment climate, a boost of the performance of private sector providing support for pre-feasibility studies combined with technical expertise and advisory for the promotion of the projects, as well as the increase of access to finance. Otherwise, there is always the risk to follow with business as usual, which means that electricity capacity will reach a certain abundance around 2020, and for all the rest of the period 2020-2030 the country will be constantly dependent on imports even for limited amounts of electricity.

Source: energyworldmag