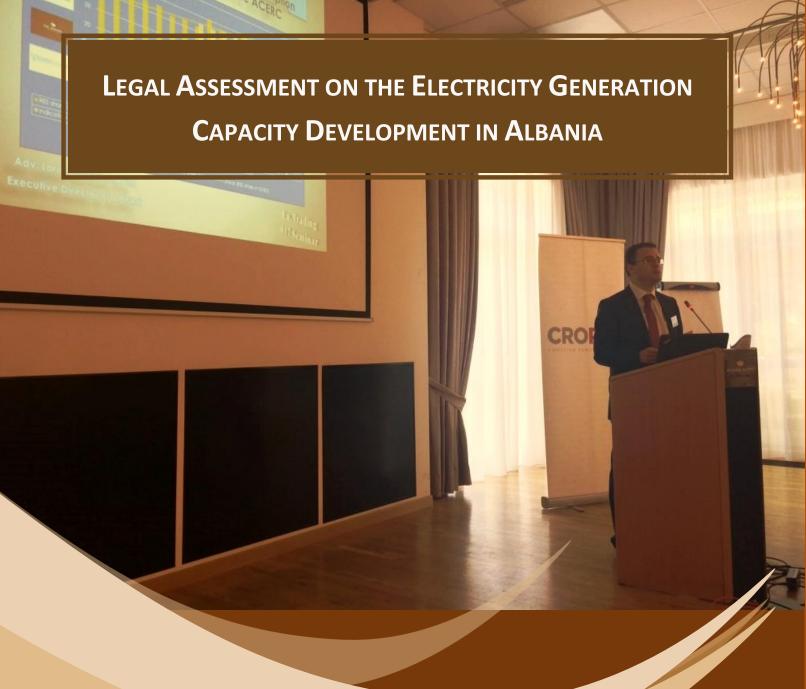
# EN.TRADING 017: "KEEPING UP WITH SEE POWER MARKET DEVELOPMENT" PRESENTED BY EUROELEKTRA - ACERC



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Prepared in view of: "En.Trading 017 Seminar, Tirana",

Montel Energetika.NET

# LEGAL ASSESSMENT ON THE ELECTRICITY GENERATION CAPACITY DEVELOPMENT IN ALBANIA

### THE MAIN BULLET POINTS COVERED:

- > Regional Targets and Biding Obligations
- > Statistical Findings on Demand Request and Investments
- > Hydropower Policy, a failure or success, in Albania?
- > A Revolution Era of Photovoltaics Deployment!
- > New Projections on the Conventional Power Plants
- Forecast on the Future Scenarios by ACERC

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ACERC main activities consists in build-up collaborations and supports to market players in study researches such as the certificate reports, articles and periodicals. The transfer of high expertise through building-up institutional capacities by national and regional training courses, seminars and conferences. The institutional representation and integration within national and international public and regulatory authorities.

For more visit the Official Website of ACERC | Albania Energy Market - AEM Group in LinkedIn

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"ACERC mission aim to promote and develop the renewable energy sector in Albania"





LEGAL ASSESSMENT ON THE ELECTRICITY GENERATION CAPACITY DEVELOPMENT IN ALBANIA

This report has been part of the En.Trading 017 Seminar, Tirana: "Keeping up with SEE power market development", Hotel Rogner, Tirana, 14. September 2017

### Abstract

The here presentation, aim to bring an synthetic overview, based in our daily empirical experience on legal granting rights, about the investments in process and future projections development of the national electricity generation capacity.

The main bulled point, offer an answer, to the pressing today's concerns, such are: "Following the today trends of investments and public policies, when it is predicted to be meet the internal demand in Albania", "What kind of sources and quantity of offer has to be expected from the country in the upcoming 5, 10, 15 years", etc.

The above, to give a support of the strategic analyses on the potential of the trading and supply activities in Albania. A presentation that will become part of discussion in national and international seminars, workshops and conferences and can be find directly to our bookstore.

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# I. List of Abbreviations and Symbols

- CA Concessionary Agreement
- EBRD European Bank for Reconstruction and Development
- ECS Energy Community Secretariat
- EnC Energy Community
- EU European Union
- FiT Feed-in Tariff
- HPP Hydro power plant
- IFI International Financing Institution
- IRR Internal Return Rate
- PPA Power Purchase Agreements
- PPP Public Private Partnership
- SHPP Small hydro power plant
- SEE South East Europe

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### **1.** Regional Targets and Biding Obligations



Albania is at a pivotal moment in deciding its optimal strategy for development of the energy The sector. country, in framework of the Western Balkans (WBs) region has adopted at 2012, near-term

renewable energy target 38% within 2020, and it is well aligned with EU commitments of 2030. Further, in parallel with creation of regional market, it is followed with a road map signed by the Paris Sustainability Charter, at the 4 July 2016. However, all the above do not implies any condition or/and choices about the resource to be deployed, the support measures to be adapted, or other similar aspects related with investments.

# 2. Statistical Findings on Demand Request and Investments

Nerveless, the above efforts, has made that the share of renewable sources in gross final energy consumption (GFEC), according to most recent data available by Eurostat, to reaffirm the country-keeping path with its indicative target, reaching the 34.9% in 2015. Then, the renewables have started to take off in good portion, even with the problem that the entirely is concentrated in the hydropower sources, except few single and individual small projects, such are the Urban Waste Processing Plant of Elbasan by 2.85 MW, Photovoltaic Central of Korça (UKKO) by 1 MW, etc.

Along 2016, the available electricity request was at the level of 7094 GWh, and during the first semester of 2017 it increased by well 5.0% (INSTAT, August 2017). The future foreseen an intensive growth of the demand, which refereeing to the base scenarios of the ERE with a predicted growth rate by 1,5%, or/and based to the regional study Sled SEE 2016 up at 3%, foreseeing an peak up of the



level of demand among the 10,8 TWh - 13 TWh within 2030.

## 3. Hydropower Policy, a failure or success, in Albania?

The hydropower regimes in European Union (EU), included Balkan EU Member States (MS), reveals considerably discrepancies among the granting rights, based mostly on simple permits and in few case licenses. A heterogeneous situation reflected in the WBs, with the use mostly of the granting through authorizations for the small Hydro Power Plant (HPP) not of particular interest for foreigner investors, and related to the bigger and the most important projects using the model of Public Private Partnership (PPP).

The above strong relation partnership was offered by Albanian authority to give a particular boost of the investments, mitigating the impact of variables occurring on time, through: (i) the freely negotiation of provisions governing the contract, with accepting financial modelling by internal return rate (IRR) at 16-22%; (ii) the guarantee intake of all the power generated with a Power Purchase Agreements (PPA) based in the "feed-in" model for a period of 15 years; (iii) the assure and the facilitate on the given of permits (needed up to 20), through the consideration as an co-responsibility among the private and public authorities. Then, today above than 96 companies has reached to installed 139 small and medium seizes HPPs for a total capacity at 561 MW (Ere Report, 2017).



However, there is still a significant undeveloped potential with a lowest LCOE compered to all the European countries, which make predictable that the hydro generation, according to most ambition scenarios will double by 2030. There are already granted and still to be develop, above 2100 MW (2015), from which them with a PPA up to 15 MW need to be completed within 2020

(to preserve the PPA!).

As there is already ongoing with the cancellations, mainly due to the 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. As from the already cancelled there are the new calls on capacity (e.g. HPP Shala, and Kalivaç, etc.), as well as the started with preparation of feasibility studies such as the case of HPP Skavica, leading up the decision on investments taken in WB6 Summit in Trieste (12 July 2017).

Ref.

# 4. A Revolution Era Opening to 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 import of electricity rise rapidly (which could peak up historically to 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 thought the protecting of the environment. A choice to PV is the most logical and emphasized by the perfect match that the periods with lack of rains are compensate by more radiation of the sunshine: the Albanian has in average 240-300 days with sun for year, with exploitation of solar energy production range among 1500-1800 kWh/m<sup>2</sup>/a.

Then, the need to reduce dependence on hydro with the rapid falling technology costs on PV landscape, has led to favourably provision introduced with the new RES Law 7/2017, through diverse procedures, form: (i) the mid-spring 2017, there was the open of opportunities for self-consumption in NetMeeting regime, for households and companies up to 500kV, granted thought a simplify permission procedure (taking in all 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  $\notin$ /MWh, granted thought authorisation procedure for central up to 2MW for a total capacity, among 50-100 MW.

In last, followed the EBRD and the Energy Community Secretariat (ECS) MoU signed on 9 June 2017 came out the notice that can "revolutionary" the entire sector of energy in Albanian. The EBRD aim to cooperate in development and implementing a framework for the allocation, of one or two big international bid rounds, for a capacity up to 700 MW (minimum 500 mil/€) within 2020. Based on MoU the Ministry of Industry and Energy (MIE) has to review the legal framework, and the EBRD to setting up the auction mechanism for large-scale PV plants.

### Advertise Section



# En.Trading 017 Seminar, Tirana: "Keeping up with SEE power market development", Hotel Rogner, Tirana, 14. September 2017

Montel Energetika.NET organised this power-trading seminar, held in Tirana, Albania, focusing on the Albanian and wider southeast European (SEE) power market(s).

#### Programme

9.00 - 15.30 Seminar Programme with ample networking opportunities

Montel and Energetika.NET, together with Nord Pool, which is co-establishing the Albanian exchange office, are organising this power-trading seminar focusing on the Southeast European (SEE) power markets in Tirana, Albania.

#### **Programme highlights**:

Status of the Albanian power exchange

Albanian co-operation with Kosovo in the area of electricity

Traders' view of the Albanian power market

Debate on the future development of the Albanian power market

En. Trading 017 Seminar Agenda with invited speakers

8.30 - 9.00 Registration and Coffee

9.00 - 9.15 Seminar opening and welcome speeches: welcome from organizers

9.15 - 10.15 Status of the Albanian power exchange and the Albanian Balancing market (two sides of the same coin): in what phase are the projects, when can we expect trial operation and 'real' operation, has the admission process already started, what are the expected liquidity and prices at the start of the exchange, how will clearing be covered, what products can we expect to be traded in the Balancing Market, etc. (presented by Matias Peltoniemi, Nord Pool & Elton Radeshi, OST.pdf, and Nickolas Frydas IFC.pdf)

10.15 - 10.30 Sharing experiences with new power exchange (presented by **Silvio Brkić**, CROPEX)

10.30 - 11.00 Networking coffee break

11.00 - 12.00 Co-operation with Kosovo (market coupling, joint shareholding of power exchange) – presenting the first example of a joint regional market (presented by <u>Skender Gjonbalaj, KOSTT.pptx</u>)

12.00 - 13.00 *Trading experiences in the Albanian market so far ... (presented by* **Ermela Hoxha, Future Energy.pptx**, and **Tom Kristian Larsen, Statkraft.pdf**)

13. - 13.15 Legal Assessment on the Electricity Generation Capacity Development in Albania (presented by dr. Lorenc Gordani, Acerc)

13.15 – 13.45 Round-table debate: The Albanian power market today and tomorrow – market players' expectations and recommendations (moderated by Energetika.NET; all speakers included)

13.45 - 14.00 Programme wrap-up with Montel

14.00 - 15.30 Lunch and networking

Learn how the region's power markets function, what are the key issues driving prices, and gain valuable insight into how to create business opportunities. Join us!

### 5. New Projections on the Conventional Power Plants

The cope with the above extensive planned RES capacity, increase the need to balance the volatile system, make feasible the start looking on the natural gas not only as back-up reserve (referring already installed Valona CCGT 97 MW) but also for a proper development of a really capacity market. In fact, MIE (through Albpetrol) have already pre-agreed on a yearly capacity around 0.3 bcm of natural gas from Tap project, as well as from years are in discussion plans about CCGT Vlora II and III, respectively 120 MW and 160 MW, to come online within 2020 and 2025.

Then, based to the most update analyses offered by the Albania Gas Master Plan (GMP) 2017, the decrease of fuel costs, make to predicted the total rate of penetration of the potential thermal demand in Albania to 1.5 bcm within 2020 and to 3 bcm within 2040. However, GMP foresee as realistic, with an economic optimization, the future natural gas consumption for electricity generation at the level of 770 mcm within 2040. Regard the legal form of engagements, it is still to be wait the outcome of the feasibility on regulatory and market analysis, taken with the support of IFC, on the IPP CCGT Korça 500 MW.

### 6. Forecast on the Future Scenarios by ACERC

In an overall above conclusion, conscious that the analyses of legal framework, even when integrated with best practices could not reveal for entire what future may reserve, the following three main assessments could be already drawn:

- Due to the budget restriction and limit of expenditure, in accordance with IFI's, there is not foreseen possible the enter of any public capital in energy sector (except moved by security reasons, such may be for the development together with Kosovo of the HPP Skavica and Zhur above 600 MW). The public policy that are thought to drew any choices guided by thinking with cost estimation (i.e. using a Levelised Cost of Electricity - LCOE) to get the less economic impact for the public budget and the burdens for each consumer in Albania.

- Then, the most probable energy mix production of electricity in Albanian has to based mostly at the hydro-powers, some important part of photovoltaics and a few portion of natural gas. Notwithstanding, as in past the assistance of IFI's will not be missed, the "fear" is that the private and public sector will not fully be able to get advantage of all its potential, but at contrary as experiences has shown often many time it risk to be taken only the complexity of institutional and organisational framework, with a lot of delays in the ongoing streamline of projects.



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# Adv. Lorenc Gordani, PhD Law Adviser in Energy Policy, Regulation & Infrastructure

Main professional activities areas covers the legal strategic expertise, the applied research and capacity building in EU and Albania energy law and policy for industry and interest groups, international institution, and public authority, with particular focus on the market design and related policy issues, concerning the promotion of a sustainable integration of energy market in the Western Balkans.

Academic education and post qualification have taken place in Italy, Germany, France, Cyprus, Swiss, Netherlands, Belgium, Sweden, Poland, Ukraine, etc. Based to which it has worked as researcher, professor and trainer at national and international level and engaged as legal advisor and a consultant of public authorities and international companies. Activities accompanied with a publication of an extensively bibliography on EU law implementation and particularly on energy law and policy.

For more find at the Official Website of ACERC | Lorenc Gordani in LinkedIn.

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