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REPORT

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The economic and social impact of small hydropower in Albania.

Justification of incentives system



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THE ECONOMIC AND SOCIAL IMPACT OF SMALL HYDROPOWER IN ALBANIA.

JUSTIFICATION OF INCENTIVES SYSTEM

REPORT FOR: WWF ADRIA

PREPARED BY: ECO-ALBANIA RESEARCH TEAM

LIST OF ABBREVIATIONS

HPP	Hydropower Plant
MW	Mega Watt (Installed capacity unit of energy producer)
FiT	Feed-in Tariff
GoA	Government of Albania
NGO	Non-Governmental Organization
kWh	Kilo watt hours (unit of energy production due time)
RES	Renewable Energy Sources
OSHEE	Operator of Distribution of Electric Energy
METE	Ministry for Economy Trade and Energy (prior to MIE)
NREAP	National Renewable Energy Action Plan
CMD	Council of Ministers Decision
MIE	Ministry for Infrastructure and Energy
NANR	National Agency for Natural Resources
ALBEITI	Albanian Extractive Industries Transparency Initiative
PPA	Power Purchase Agreement
KESH	Albanian Electro-Energy Corporation
ERE	Energy Regulatory Entity
PPs	Priority Producers of Energy
TSO	Transition System Operator
DSO	Distribution System Operator
CfD	Contract for Difference
INSTAT	Albanian Statistical Institute
QKB	National Business Registry
GDT	General Directorate of Taxes
OST	Energy Distribution System Operator in Albania
ATRAKO	National Agency for Concessions Treatment
LGU	Local Government Unit
SSAC	Supreme State Audit Control
VAT	Value Added Tax
AREA	Albanian Renewable Energy Association

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1. INTRODUCTION AND BACKGROUND

1.1 ABOUT THIS PROJECT AND HOW TO READ THIS PAPER

This report examines the economic and social impact of small-scale hydro power plants (HPPs) in Albania. It is intended to present a factual picture of the economic benefits of small HPPs in Albania. As such it will be of interest to those working in the fields of energy, community regeneration and environmental protection.

While the contribution of the small HPPs make to the country’s overall energy demand is significantly < 19.5%¹ for 2019 and will not see itself likely to lead any local or regional employment or carbon mitigated impacts, the amount generated and income generated could be significant for local communities, if the profit was shared properly.

This report seeks to estimate and contextualize the social and economic benefits of small HPPs (<15 MW) in Albania which are built and in operation.

The report reveals the reality of a sector currently wholly dependent on subsidies system, and with that subsidy changing year on year. An annual struggle to make the installations operational within a higher Feed-in-Tariff (FiT) window is evident, and a number of our respondents evidenced pessimism about sector prospects due to the changing subsidy regime very often.

The sector is then caught in a “pincer” of changing (*attempts to decrease from the Government side and efforts to maintain status quo from producers*) subsidy (latest decision enters in force after 2020) and the increase of competition over funds.² Recent auctions issued by the GoA in both solar and wind are reaching the target investment, which suggest that further growth in the already established techniques of small hydro power may be problematic and challenging.

With this context in mind the objectives of this report are as detailed in Table 1.1

TABLE 1.1 REPORT OBJECTIVES

1.	To qualitatively collect information through (but not only) interviews with relevant state and other competent authorities, NGO sector and HPPs owners.
2.	Explaining the system of subsidies and feed-in tariffs for priority producers of HPPs.
3.	Analysis of the socio - economic justification of the existing incentive system.

The objectives above closely follow the remit requested by WWF Adria and EcoAlbania. The research team will explain in further details the installed kW, estimate the kWh generated and the gross expenditure in EUR.

It should be noted that this report is primarily aimed at relatively sophisticated and engaged policy, community, industry, and campaign audiences.

1.2 ALBANIA'S ENERGY OUTLOOK AND THE IMPORTANCE OF HYDRO ENERGY

Traditionally, Albania electricity is based on hydropower which stays precisely 99.8%.³ The rise of electricity from hydropower production has been the only solution and therefore, the electricity security strategy is based on the increased generation capacities.

By analysing some of the main indicators of the electricity production specifically in 2018, it should be emphasized that Albania experienced an increase in electricity generation up to 89% compared to the generation in 2017.⁴ In 2018 alone, 11 new producers entered the market which added 18,966 MWh in the energy market in Albania. Whereas in 2019, other 29 new producers entered production with a total generation of 60,961 MWh.

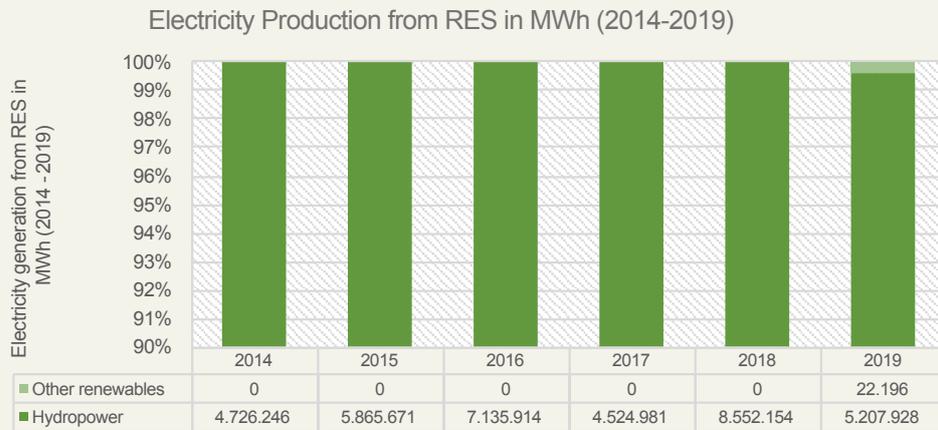
Table 1 presents a situation of the Albanian electricity balance during the period 2014-2019.⁵

Year	2014	2015	2016	2017	2018	2019
Net domestic production	4 726 246	5 865 671	7 135 914	4 524 981	8 282 154	5 207 928
Hydropower	4 726 246	5 865 671	7 135 914	4 524 981	8 282 154	5 207 928
Public Hydropower	3 048 556	4 451 975	5 091 616	2 916 990	5 580 934	2 979 252
Private HPP concession	1 317 690	1 413 696	2 044 297	1 607 991	2 701 220	2 226 794
Other renewables (solar)	0	0	0	0	0	22 196
Wind Power	0	0	0	0	0	0
Gross import (including exchanges)	3 355 987	2 355 358	1 826 753	3 403 043	1 771 740	3 176 515
Gross export (including exchanges)	288 497	955 941	1 868 605	488 415	2 685 045	770 480
Energy consumption	7 793 736	9 265 089	7 094 061	7 439 609	7 638 848	7 612 079

Table 1: Albania electricity balance in MWh, during 2014-2019.

Source of data from ERE reports 2014;2015; 2016; 2017; 2018; 2019

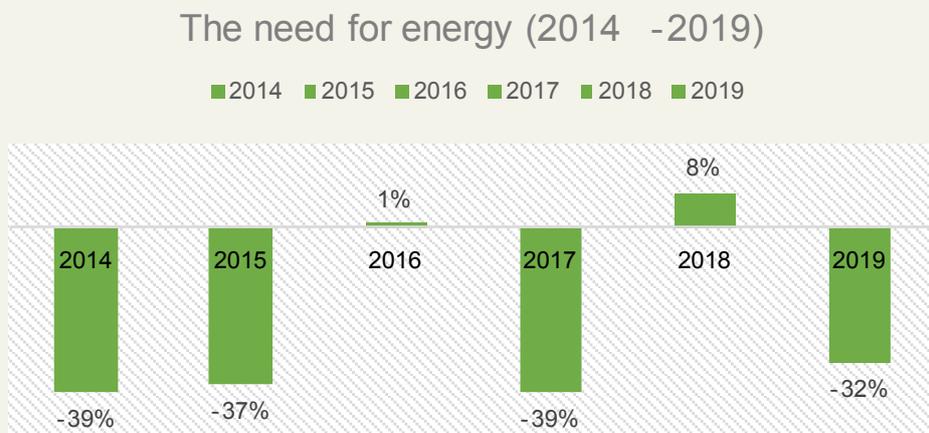
As seen from the data presented above, the Albanian electricity outlook is highly dependent on **hydro energy**. Almost 100% of the electricity production comes from hydropower. According to the data, RES other than hydropower are rather newly developed and contribute less than 1% only in 2019, whereas the production prior to 2019 is 0 MWh.



Graphic 1: Electricity production from RES 2014-2019. Source: ERE reports. Prepared by Author.

In addition, the data shows that the market is dependent upon precipitation thus making the sector very **vulnerable to climatic** changes.

For example, in 2018, Albania saw the largest production of 8.5 TWh since 1985 of which 68.31% was produced from the public plants and 31.69% from the private and the concessionary hydropower plants. This is the year where the production has covered the total country's energy demand alongside with the year 2016.

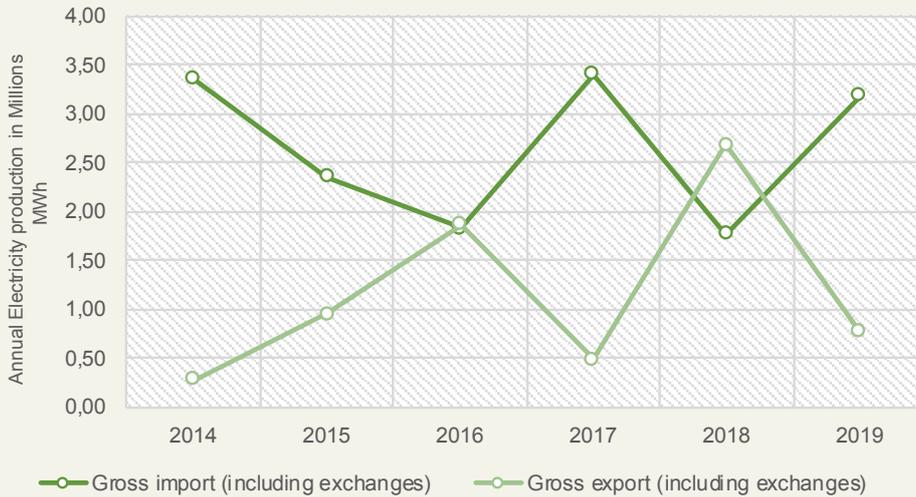


Graphic 2. The need for energy / electricity production ratio 2014-2019. Source: ERE reports. Prepared by Author.

Whereas, in 2019, the precipitation situation changed the electricity balance which was marked by high import quantities and losses for the Distribution Service Provider (OSHEE). In 2019, the energy generation was 39.01% less than in 2018.⁶ However, the public hydropower generation capacity was only 57.2%, whereas 42.8% was produced by private and concessionary HPPs which marked a change in the market share between the private-public HPPs.

The dependence on precipitation of the energy sector can have a fluctuant impact on the economy, especially regarding the import/export ratio.

Import / Export Balance of Energy (2014 - 2019)



Graphic 3. The import/export energy ratio 2014-2019. Source: ERE reports. Prepared by Author.

Overall, the electricity generation from renewables continues to grow with new output up by 18.966 MWh only in 2018 and other 60,961 MWh in 2019. Specifically, electricity generation by the Priority Producers (*HPPs with capacity up to 15 MW subject to FiT*) has marked an increasing trend starting from 2009 to 2019. The graph below shows the amount of electricity produced by Priority Producers including Ashta HPP.

[Note: Ashta HPP has a capacity of 53 MW and has signed a Purchase Power Agreement with the Government of Albania and ratified in the Parliament. This agreement has given the HPP a “special” status and it benefits from the feed in system equally as any preferential producer. ⁷ For the sake of this study analysis, Ashta HPP is integrated in all graphs and table calculations].

Production during the years from Priority producers in MWh



Graphic 4: Production from Priority Producer 2006-2019. Source: ERE reports. Prepared by Author.

This made the list of Priority Producers grow in 2019 into 182 HPPs owned by 128 companies.⁸

Growth in output production was also marked in solar energy with the new production up to 22,196 MWh from 8 solar farms which entered production in 2019. The Government of Albania has committed to achieve its target of 38% as shares of energy from renewable sources until 2020.⁹ This obligation derives from its membership in the treaty of Energy Community and the objectives set in the National Renewable Action Plan (NREAP) approved with CMD no. 79, dated 28.3.2018.

At the moment, Albania has updated its NREAP for the period 2018-2020 and identified its needed capacities to achieve its energy target. Albania will need to install up to 738 MW of new power generation plants that are foreseen to be included in the FiT system, divided as follows:

Capacity in MW



Graphic 5: New capacity allocation as per NREAP

2. CONCESSIONS, POLICIES AND CONCESSION FEES IN ALBANIA

The Ministry of Infrastructure and Energy (MIE) which is responsible for energy acts as the Contracting Authority for all concessions granted in the hydropower sector. Legislation and regulations for concessions define the principles and procedures for the evaluation and granting of the concession opportunities in the hydropower sector. According to the concession law and regulation, all concessions in Albania are granted for a period not longer than 35 years.⁴⁰

Until May 2013, the construction and operation of hydropower plants in Albania was regulated by Law No. 9663, dated 18 December 2006 “On Concessions” (Old Concessions Law) and accompanying regulation “On the evaluation and granting of concession”, approved by Decision No. 1701, dated December 17th, 2012. The provisions of the old concession regulation establish the organisation of hydropower concessions as Build-Operate-Transfer. According to this regulation, the operator finances the construction of the power plant and benefits from operation of the plant. The sale of power generated by the Operator is guaranteed through the Power Purchase Agreements signed between the Operator and Wholesale Public Suppliers with tariffs regulated by ERE using the “feed in” model.

In May 2013 the old concession law and regulation was replaced by Law No. 123/2013 “On Concessions and Public-Private Partnership” (“Law on Concessions and PPP”) and accompanying Regulations “For the evaluation and granting of concessions and public-private partnership” approved with CMD. No. 575 dated July 10, 2013 (“New Concessions Regulation”). In an attempt to harmonize with the EU Directive 2004/18/EC¹⁰, the new law and regulation introduced the concept of Public-Private Partnership (PPP) and the extension of rights, responsibilities of each party and risk allocation during the concession period.

The Ministry of Energy may identify areas for concessions through review of submissions received (unsolicited proposals) from private investors or other government institutions and nongovernmental organizations. Despite various attempts to abolish the unsolicited proposal article for hydropower, including the one from Eco-Albania, the initiative was blocked by the Parliamentary Committee on Economy.⁴¹ The law was amended again through Law No.77/ 2015 and very recently in September 2019 through law No.50/2019.

Before announcing the concession opportunities, MIE will ensure the technical feasibility and economic, environmental, and social impact of any agreement, in accordance with the applicable laws. When private investors initiate unsolicited proposals, they need to carry out and present a feasibility study in their project proposal in accordance with minimum requirements of the applicable laws. The project proposal undergoes a technical evaluation in accordance to CMD.

No. 191, dated March 22, 2007 “For the establishment of state technical opposition for the construction of projects of HPP under concession”.¹² This evaluation is carried out by the group of hydro-energy, geology and the environment experts appointed by the Minister responsible for the energy and approved by National Agency for Natural Resources (NANR) in accordance with Law No. 111/2012, dated 15.11.2012, “On Integrated Water Management”¹³ and the Law No. 8402, dated September 10, 1998 “On the control and regulation of construction works”.¹⁴

When project proposals turn into concession opportunities the Ministry invites all interested applicants to a tender procedure published through a contract notice, in accordance with Law No. 9643 November 20, 2006 “On Public Procurement” (“The law on public procurement”). According to Concession law and regulation each applicant shall be treated fairly. However, article 7 of the new concession law allows the evaluation committee to assign a bonus up to 10% credits to the project proposer. If the concession is assigned to an investor other than the initial proposer, the new regulation provides compensation for the concession to the project proposer that varies from 0.5% to 2% of the concession based on the extent of the feasibility study carried out in the initial project proposal.

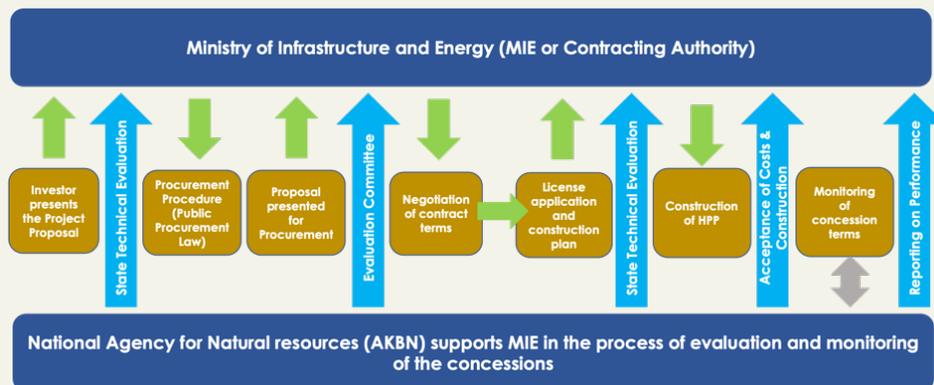


Figure 1. Granting and monitoring process of concessions. Source: MIE; AlbEITI.

2.1 THE CONCESSION LEGAL CRITERIA:

The concession fees in Albania are set based in 2 main criteria as follows:

- a) Greater technical and economic advantages as assessed by the Contracting Authority, or
- b) Higher concession fee offered for the technical specifications required in the contract notice.

The operator must guarantee the performance of his duties up to 10% of the investment, guarantee executable in cases of termination of contract or violation of contractual terms.

¹² DCM No. 191 dated March 22, 2007 “For the establishment of state technical opposition for to construction projects of HPP with concession”

¹³ Amended with Law No. 6/2018, dated 8 February 2018

¹⁴ Ibid.

Upon signing of the concession contract, the operator develops the detailed construction plan, which undergoes the state technical evaluation before being approved. Construction of hydropower plants is subject to several permits and licenses from various regulatory bodies, including: environmental permit, permits for construction (preconstruction), permission for the use of water resources, license for power generation (before start of operations), permission to connect to the transmission etc.

2.2 HYDROPOWER NOT SUBJECT TO CONCESSIONS

In addition to concessions law, in 2015, a council of minister's decision no. 822 "On the approval of procedures for building new capacity which are not subject of concessions",¹⁵ allowed hydropower plants below 2 MW to be approved without passing a competitive concession procedure. This decision is based on the law No.43/2015 "On the Power Sector", under article 49, amended with law no.7/2018, dated 15th of February 2018.

Total Hydropower	No of contracts	No. of HPPs	Unsolicited proposals
	73	79	132

Table 2: Total number of planned small scale hydropower plants in Albania

Thus, the scheme for issuing the small scale HPPs non subject to concession procedures, would be the reduced version of the one described in Figure 1 above. The first 3 steps are skipped and the procedure starts with the proposal of the project by the private developer to the Public Authority. The agreement in this case is not a concessionary one and the process does not go through procurement rules. The permission is issued by a simple approval document issued by the Minister for Energy and Infrastructure. According to local paper articles, such as the one revealed in 2019, an additional 223 plants had already been approved outside of the concession system.¹⁶ This list is not yet public but was provided to journalist Artan Rama through a court ruling following refusal of access to information by the Ministry of Energy. It includes 73 new contracts corresponding to 79 hydropower plants, and a register of 132 unsolicited proposals to build power plants which were approved earlier and correspond to another 144 hydropower plants. According to Artan Rama, this brings the total number of hydropower plants approved by the Ministry of Infrastructure and Energy to a shocking 714.

¹⁵ Decision of the Council of Ministers no. 822/2015

¹⁶ Artan Rama: Albania: Concerns over Increased Number of HPP Concessions, Exit.al, 26.09.2019

3. THE RENEWABLES PROMOTION SYSTEM IN ALBANIA

Renewable energy sources in Albania are promoted through feed-in tariff, grid connection, customs and excise tax exemptions. A feed-in tariff for small renewable energy power plants as well as a premium tariff for larger ones are in place and have a duration of 15 years. The latter is determined in a public auction. The public energy supplier is obliged to pay a regulated tariff for the electricity generated from renewable energy sources. Small producers are also entitled to benefit from a net-metering scheme. The grid operator is obliged to connect to the system any renewable energy generating plant meeting the conditions for connection. Renewable energy is given priority with regard to grid connection and enjoys the priority of dispatch. Taking into consideration the scope of this study focused only in the HPP, this section will present an overview of the legal and fiscal background, the net metering system, the tax exemption and the tender and auction process. It is important the presentation of the stakeholders in the whole chain system of feed-in system.

3.1 LEGAL AND FISCAL BACKGROUND FOR FEED-IN TARIFF

In Albania between 2007 and 2017, new and existing hydropower plants up to 15 MW were able to sign contracts and have all the electricity produced purchased via the feed-in tariffs system. These were the only forms of renewable energy supported. The electricity produced by small hydropower plants is purchased via a Power Purchase Agreement (PPA) at a preferential fixed price by the state-owned company KESH and this will continue until their contracts expire.

In the past, the law *on the power sector, together with Council of Ministers Decision no. 27 On approval of rules for evaluation and granting of concessions, and Decree no. 338, dated 19.03.2008 On approval of the Albanian Market Model*, provided the basis for the Albanian Energy Regulator Authority (ERE) to adopt two different feed-in tariff methodologies: a) one for existing small plants, and b) one for the new plants commissioned after December 2006.¹⁷

However, a new Law on Renewable Energy Resources, no. 138/2013, dated 02.05.2013, transposed Directive 2009/28/EC, stipulated the need for the Council of Ministers to approve a renewable energy target and National Renewable Energy Action Plan. It reiterated KESH's obligation to buy off electricity from renewable producers if requested and outlined a new methodology for calculating feed-in tariffs, which would be the same for existing and new plants.

A new calculation was approved via Decree No. 817 of 26 November 2014, indexing the FiT to the electricity price exchanged in the Hungarian Power Exchange (day-ahead price), multiplied by a coefficient.

¹⁷ Bankwatch (2019), Hydropower subsidies in Albania. Where are the opportunities for civil society to intervene. Commissioned by Euronatur

$$FiT = HUPX \frac{EUR}{MWH} \times 1.3(\text{coefficient for renewable}) \times \frac{EUR}{Exchange}$$

For 2018, as an example, the FiT per MWh was around EUR 64.5.

$$FiT (2018) = HUPX 50.4 \frac{EUR}{MWh} \times 1.3 \times \frac{EUR}{Exchange} 123.45 \text{ All}$$

The CMD no. 687 dated 22.11.2017, approved a methodology for the setting of prices for electricity for the existing priority producers. The CMD, under paragraph 2, ç and d, set the limit (minimum and maximum) for the electricity purchase prices which can be neither less than 15% or more than 15% of the reference price set by ERE in 2016.

The graph below presents the prices set by ERE during the period 2016-2020 and an explanation of the reference price in ALL on which the prices have been set. As it can be seen in the graph, in 2018, ERE applied the maximum price allowed by the law.



Graphic 6: The price for priority producers set by ERE during 2016-2020 per kWh

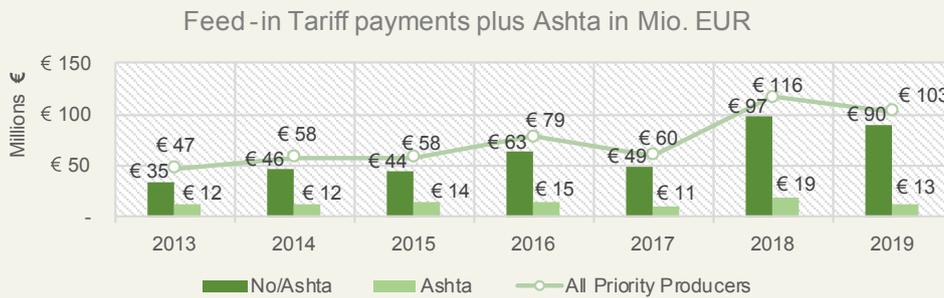
Law no. 138/2013 finally brought feed-in tariffs into the legislation on renewable energy resources instead of the legislation on concessions, but was still not sufficiently detailed about the actual conditions that needed to be met by the producer in order to qualify as a privileged producer and receive feed-in tariffs.

In 2016, a decision¹⁸ switching the obligation for purchase of renewable energy onto the Distribution System Operator (OSHEE), rather than KESH was taken. The decision was based on the fact that OSHEE needs to buy the electricity from priority producers to cover its losses.¹⁹ Currently, the feed-in tariffs continue to be a major burden, now directly for end users rather than for KESH.²⁰ In 2019, hydropower received 100 per cent of feed-in tariffs in Albania - around EUR 90 million. The graph below presents the situation of feed in payment for the period 2013-2019 in total value considering Ashta and without Ashta calculations.

¹⁸ CMD No.244, dated 30.03.2016 "On the approval of criteria for the obligation of Public Service Duties".

¹⁹ OSHEE company expenses for electricity purchase from the priority producers and Ashta HPP in 2018 occupied about 50.2% of the total expenses for electricity purchase. It was observed that the purchased quantity by OSHEE company from these producers (1,696 GWh) with an average price of about 66,37 Euro/MWh, exceeded the needs to cover the losses of about 1,538 GWh as provided in the Council of Minister's Decision No. 244, dated 30.03.2016. The difference of about 158 GWh is used to cover the request of the Universal Service Customers. This fact enhances the need of the legal adjustments to solve the issue of accommodating in the market of the electricity quantity from the renewable resources resulting beyond the needs to cover the losses in the distribution network of the Distribution System Operator.

²⁰ Law no. 138/2013, "Renewable Energy Law", art. 11. The costs of the feed-in tariff for electricity produced from renewable energy sources are borne by the final consumers.



Graphic 7: Payments to priority producers for hydropower under 15 MW, 2013-2019
 Source: Calculated from Albania Energy Regulator annual report 2018, p.156

The amount paid to Priority Producers in Albania is large and is increasing annually despite the fact that, for example, in 2019 the precipitation was much worse than in 2018. However, the entrance into operation of 29 new producers has changed the energy balance in Albania between the private versus public producers in terms of production at the ratio of (57.2% public against 42.8% private). The graph below is presenting an overview of the FiT paid by Albania for PPs during 2016-2019, divided as per the methodology approved by ERE.



Graphic 8: FiT payment divided as per ERE methodology 2016-2019

3.2 NET METERING

The public utility (OSHEE) is obliged to purchase electricity from renewable energy producers.²¹ For small and medium-sized companies as well as private households, a net-metering scheme for solar and wind installations <500 kW is in place.²² In Albania, for plants which obtained concessions under the 2007 Decision on concessions, the process of approving the concession and the approval of privileged producer status were combined, together. Whereas, for plants receiving a feed-in tariff under Law 138/2013, the situation for obtaining the status of privileged producer is based on the CAP (less than 15 MW).

3.3 TAX REGULATION MECHANISMS (TAX EXEMPTIONS FOR RENEWABLE ENERGY MACHINERY AND EQUIPMENT)

The regulatory framework stipulates the exemption from the custom duties of machineries and equipment used for construction of new power capacities using renewable energy sources.²³ In addition, excise tax exemptions for the fuel used by electricity producers are in place.²⁴

The process flow is as follows: Import Duties exemptions. Investors in power production based on renewable energy sources, after obtaining the relevant building permit, must submit to the ministry responsible for energy, 6 months prior to importation, a complete list of specified machinery and equipment, which will be imported for the planned renewable energy power plant. The Ministry verifies and adopts the list. The Directorate General of Customs based on the list approved by the Ministry implements the exemption from import duties.²⁵

Excise Tax exemptions. Natural or legal entities who use fuels for electricity generation (including from renewable energy sources) for selling or for their own consumption can apply for excise tax exemption for the used fuel. The application must be submitted to the customs office by the 10th of the following month for the fuel used for electricity production in the previous month.²⁶

21 CMD No. 244, *ibid.*

22 Law no.138/2013, Art. 15

23 Decision Nr. 612 on Implementing Provisions of the Law on Excise Taxes

24 Art. 42, decision on excise tax law.

25 Art. 1-6, Decision No. 612 Reimbursement Decision.

26 Art 42 & 43 Decision on Excise Tax Law

3.4 TENDER (CONTRACT FOR DIFFERENCE)

As stated above, the public utility is obliged to purchase electricity from renewable energy producers. For large renewable energy producers, the remuneration by a premium tariff is determined through a competitive bidding process, which is set in a contract between the utility and the renewable energy producer.²⁷ All renewable energy sources are eligible for support under this scheme.²⁸

Renewable energy producers can bid for a premium tariff. The auction terms and conditions are proposed by the Energy Minister and approved by a decision of the council of ministers.²⁹ The tender itself is open to all technologies but can be limited to certain technologies by the Minister and the Council of Ministers if certain criteria with regard to network connection cost, resource diversification etc.³⁰

For example, in 2017 the starting price was set to € 7.6 per kWh for wind and € 10.0 per kWh for solar. Whereas, in 2019 the price for solar was €75 and the price for wind was €101.2 for MWh.

The construction of new generating capacities of up to 2 MW is approved by the Ministry of Energy, whereas the generation capacities of more than 2 MW are approved by the Council of Ministers.³¹ Additionally, renewable energy capacities require the license granted by the Albanian Energy Regulatory Authority. The license is granted based on the technical and economic documentation together with the approvals from the relevant bodies including environmental permissions, water usage permission and permissions from TSO and DSO.

The renewable energy producers with the obtained license conclude a Power Purchase Agreement with the Electricity Power Distribution System Operator (OSHEE sh.a.)

In the transition period up till the end of 2020, solar and wind producers above this threshold, and hydropower plants between 2-15 MW can obtain contracts for difference (CfD) without an auction if they obtain a usage certificate before the end of 2020, leaving a window of opportunity for producers who have already started developing their projects. Other renewable energy installations of any size - except hydropower, for which a maximum size of 15 MW is stipulated - must compete in auctions for a feed-in premium implemented through a Contract for Difference (CfD) lasting a maximum of 15 years. Support under the CfD takes the form of a variable premium calculated as the difference between the price with which the renewable energy producer was declared successful in the auction for granting the aid (the strike price) and the market price for electricity (the reference price). Considering that Albania does not yet have a day-ahead market in place, provisions have been foreseen for the ERE to calculate prices which will serve as market prices until a liquid market is functional. This leaves only plants under 2 MW eligible for new feed-in tariffs. At the moment of report writing the Government has taken a decision on 13 May 2020 to reduce the feed-in tariff coefficient from 1.3 to 1.2 for all Priority Producers for 2020. Ultimately, the change of feed-in tariff will be decisive for new operators to show the economic rentability of their project.

27 Law no. 138/2013, "Renewable Energy Law", Art. 3 f.gj.

28 Ibid, art.3.dh

29 Ibid, art.9 & 4

30 Ibid, art.9 and 3

31 Law 43/2015 on Power Sector, Art. 49

3.5 GRID CONNECTION

The grid operator is obliged to connect to the system any energy generating plant meeting the conditions for connection. Renewable energy is given priority with regards to grid connection. Transmission and distribution system operators should ensure the access to the grid for all customers and system users if the technical and economic conditions are provided.³² Electricity from renewable energy sources shall have priority and guaranteed access to the electricity grid.³³ Renewable energy is given priority with regards to the electricity grid connection, while transmission and distribution is based on non-discrimination.³⁴ However, the full costs for the connection to the grid are borne by the party requesting the connection.³⁵

32 Law 7/2017, Art. 13 & 1;
Law no.43/2015, Art. 29

33 Law no.43/2015, Art. 29

34 Law no.7/2017, Art. 12 & 1

35 Art. 28 & 1 Power Sector Law, Art. 14 & 1 Renewable Energy Law.

4. SOCIAL AND ECONOMIC IMPACT OF SMALL HYDRO

4.1 OUR MODELLING METHODOLOGY

Our analysis of the priority producer sector was based upon primary data analysis carried out during 2020. This consisted of a variety of mechanisms intended to gather information on how the sector behaved, economically, in terms of feed in and socio-economic contribution impacts. A variety of survey techniques were used including emailed questions, telephone interviews and site-visits.

The above primary work was supplemented by secondary analysis of relevant documents and websites. In total this economic analysis is based upon detailed information from 182 HPPs owned by 124 companies and ranging from installed capacity 100 KW to 15 MWs. Whilst we believe the information gleaned is more than sufficient to provide a robust analysis, the voice of the HPP sector is rather subdued. Those contacted in the HPP for-profit sector were unable (unwilling) to provide detailed and recent financial information for their schemes, usually due to stated time/resource constraints.

Following the data collection process, the research team then needed to arrange the data in a way which represented the spending during the operational phase alone, of the Priority Producer HPPs for the calendar year 2019. The research team based its analysis for this study on a simplified Input / Output (IO) analysis and tables. This method is commonly used for estimating the impacts of positive or negative economic shocks and analysing the ripple effects throughout an economy.³⁶

- The starting point for the analysis was to develop the list of all the hydropower plants which have the Qualified Priority Producers status, using the capacity criteria alone (below 15 MW) and which are entitled to feed in tariff as per Albanian legislation.
- Then, financial information was requested by all the chain of institutions such as: ERE, NANR, General Directorate of Taxes, Ministry of Infrastructure and Energy, INSTAT, Albanian Supreme Audit Control, Association of small HPPs.
- Then, the research team developed an estimate of the direct impact based on expenditures and employment supplied by the companies through the National Business Registration (QKB).
- When estimating the number of jobs (part-time and full-time) generated by PPs, main information was based on the information received by GDT based on annual fiscal audit reports submitted by HPPs Companies.

³⁶ This type of economic analysis was originally developed by Wassily Leontief (1905–1999), who later won the Nobel Memorial Prize in Economic Sciences for his work in this area.

4.2 ECONOMIC IMPACT OF HPP

In the previous chapter of this study, there were presented the foundations for a legal, fiscal and energy viewpoint in order to facilitate the understanding of an economic and social justification of the existing feed-in system in Albania. This chapter will take into analysis the socio-economic justification of feed-in tariff, trying to calculate the cost/benefit of feed-in of hydro power plants in Albania and the social benefits of the communities from the implementation of such projects.

While doing so, hence, by comparing **social benefits** to the costs that society supports for the electricity FiT model to function, the result tells us whether something from the **social viewpoint is justified** or not. Specifically:

- For one society, any economic activity where social benefits are equal or greater than social costs, that activity is acceptable.
- The **unacceptable situation** is the one in which society has greater social costs i.e. the economic and financial loss.

This method is beneficial for evaluating individual projects and assessing the effects of existing ones and deciding on new policies or correction of existing policies through the prism of the economy.

Concretely, from the standpoint of the society, the premiums that are paid to the Priority Producers in Albania in the form of stimulating prices within the incentives system and at guaranteed prices are a direct social cost, as the money paid for FiT is taken from the citizens and transferred to the private producers.

The Albanian Government receives its share of the value created from the hydropower sector through taxation of activities, tariffs / fees and dividends or profit from selling of direct investments in the hydropower sector.

Figure 3 presents an overview of the modelling methodology taken into study for this analysis.

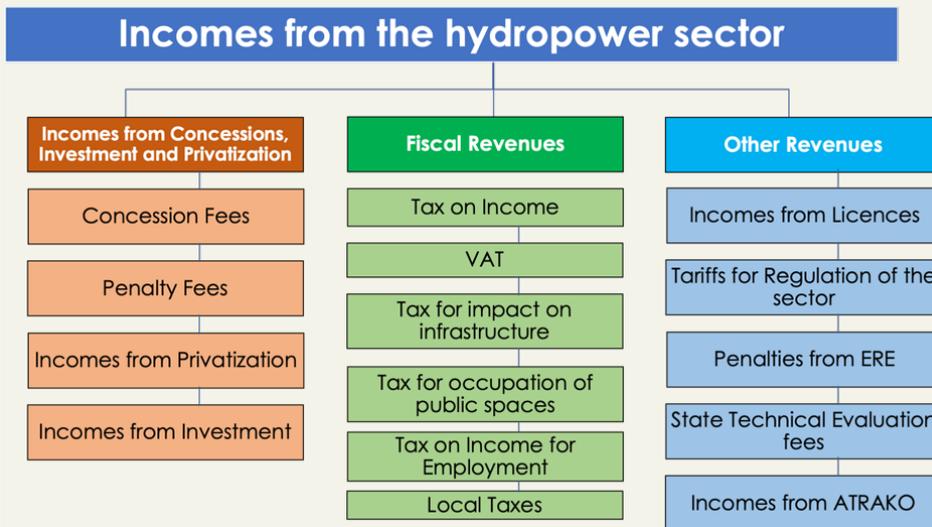


Figure 2: Main revenue stream coming from hydropower activity. Source: MIE, NANR, ALBEITI, ERE

However, considering that our study is based only on the analysis during the operational phase of the HPPs, the scheme described in the Figure 2 above is much more reduced to the indicators that are relevant only to the operational phase.

The elements that are taken into account during our evaluation of financial benefits are as listed in the Table 3.

INCOMES FROM CONCESSIONS CONTRIBUTED BY THE HYDROPOWER SECTOR

CONCESSION FEE

Concession fee is paid to the Contracting Authority as a percentage of the value of annual power output generated from the HPP and any other benefit arising from the agreement. This percentage is a confidential part of the agreement and differs in various concessions. The fee is calculated as a percentage on each monthly bill for power sold to OSHEE and OST and is collected by OSHEE and OST on behalf of the Contracting Authority, in accordance with Order No. 4 dated January 9th, 2012 of the Ministry of Economy, Trade and Energy, responsible for the energy sector at that time.

No of HPPs	Installed power in MW	Generation in MWh (2019)	Concession fee Amount
182	566	1,462,361	€ 2,586,254

*Table 3: The situation of the small hydropower plant in Albania in 2019.
Source: OSHEE Report*

PENALTIES FOR NON-COMPLIANCE WITH CONCESSION AND PPP AGREEMENT

The concession agreement stipulates penalties for:

- Breach of the deadlines for the submission of the construction project;
- Breach of the terms and conditions of the contract;
- Failure to invest at least 95% of the contracted value;
- Failure to install capacity agreed;
- Failure to produce the annual power output compared to forecasted output, etc.

Penalties are negotiated as part of the contract negotiations. Contracting Authority benefits the contract guarantee up to 10% of the investment value, if the contract is terminated as a result of the failure of the private partner to fulfil the contractual terms.

FISCAL REVENUE

TAX ON PROFIT

Profit tax is levied from the General Directorate of Taxes as a percentage of each company's net profit. Up to December 2013, in accordance with "Law on Income tax" No. 8438, dated 28th of December 1998, amended, profit tax in Albania was charged at 10% on net profit. Starting from 1 January 2014 profit tax rate increased to 15% of the company's net profit. Full requirements of this Law apply to the hydropower sector.

Based on the data received from the General Directorate of Taxes in 2019, out of 177 companies only 109 companies paid income tax. Unfortunately, the paid income tax was not made available by the general tax authorities "due to confidentiality argument". Therefore, the experts calculated the profit tax based on data provided by energy companies through the Association of Renewable Energy of Albania.³⁷ For the sake of calculating profit tax, the company Alb-Energy data for 2019 were taken as a case study.

Alb-ENERGY shpk (Bele 2 and Topojan 1) HPPs	
2019	
Installed Power	13.9 MW
Annual Production (KW/h)	90,231,000.0
Guaranteed price EUR/KWh 0.069	€ 0.0690
Total revenue	€ 6,225,939.0
Labor and maintenance costs	€ 107,574.0
Social and health insurance	€ 15,395.0
VAT	€ 725,223
Concession fee	€ 180,498.0
Local taxes (public space, tariffs, etc)	€ 26,548.0
ERE tariffs	€ 6,255.0
Amortization	€ 566,797.0
Interest expenses and loans	€ 117,251.0
Other costs and expenses	€ 72,384.0
Total expenditure	€ 1,817,925.0
Profit before taxation	€ 4,408,014.0
Income tax (15%)	€ 661,202
Net profit	€ 3,746,812.0
Income tax EUR for 1 kWh	€ 0.0073
Total production in Albania kwh	1,485,199,000.0
Income tax EUR/Kwh	€ 0.0073
Total amount of income tax	€ 10,841,952.7

37

The data was shared by AREA executive board member upon official request and verbal communication.

The total income tax from the hydropower companies subject to feed in, is assessed to be EUR 10,841,952 for all 177 HPPs in operational phase for 2019. Taking into consideration the fact that only 109 HPPs paid income tax as per the information provided by the Tax Directorate, we could estimate that a rough amount between EUR 5-6.5 M were paid as income tax from all HPPs.

VALUE ADDED TAX (VAT)

Value added tax applies at 20% of the power supply and services related to power transmission and distribution in accordance with Law No. 92/2014 dated July 27, 2014 “On value added tax” and Law No. 7928 dated April 27, 1995 “On value added tax”. Law No. 7928 dated April 27, 1995 was abrogated on January 1, 2015 with the entry into force of the new Law on VAT.

Energy is a product that is not considered as VAT excluded. Thus the Priority Producers pay the VAT amount to GDT based on the energy production at the level of 20%, although that they get full VAT reimbursed by their client (OSHEE or OST). In the context of this study the energy is not considered the amount of VAT that the companies are paying during the construction/restoration phase for the purchase of the machineries.

SOCIAL INSURANCE AND PERSONAL INCOME TAX

Contributions for social and health insurance are payable in accordance with the Law No. 9136, dated 11 September 2003, amended “On collection of compulsory contributions for the social and health insurance in the Republic of Albania” and Law. No.10383 dated 24 February 2011 “On compulsory insurance of health care” in Albania, amended. Personal tax on income is payable in accordance with the “Law on Income Tax”, amended. According to statistical rate the HPP sector assesses that for each MW installed capacity is a need for 1,5 employees. In addition to that there is at least one qualified employee/MW installed capacity in the sector that serves as Electrical engineer/Accountant/Manager. In this case study, for Personal Income Tax we assumed that 850 of employees ‘gross earnings would be 30.000 ALL, while 556 of them would earn a monthly gross salary of 55.000 ALL.³⁸ Considering the categories of the employees in the sector, we applied the rate to our estimates of gross earnings as shown in Table 4.

The social insurance rate paid by employees is 11.2% (in addition to 16.7% by employers) on secured incomes for the three categories of monthly salaries.

³⁸ Albania operates a progressive rate of personal income tax. The leveled income tax includes 3 categories: a) Monthly Gross Salary up to 30.000 ALL □ Tax on personal income = 0%; b) Monthly Gross Salary between 30.001 to 130.000 ALL □ Tax on personal income = 13%; c) Monthly Gross Salary above 130.000 ALL □ Tax on personal income = 23%;

Items	Employee Category 1		Employee Category 2	
No. of Employers	556		850	
Monthly Gross Salary	55 000 ALL	Monthly amount per category (total 556 employees)	30 000 ALL	Monthly amount per category (total 850 employees)
Tax on Incomes from Employment	3 250 ALL	1 807 000 ALL	- ALL	- ALL
Social Insurance payed by Employer	8 250 ALL	4 587 000 ALL	4 500 ALL	3 823 342 ALL
Health Care Insurance by Employer	935 ALL	519 860 ALL	510 ALL	433 312 ALL
Social Insurance payed by Employee	5 225 ALL	2 905 100 ALL	2 850 ALL	2 421 450 ALL
Health Care Insurance by Employee	935 ALL	519 860 ALL	510 ALL	433 312 ALL
TOTAL amount in ALL (Annual)		124 065 840 ALL		85 336 988 ALL
TOTAL amount in EUR (Annual)		€ 1 016 933,11		€ 699 483,51
				€ 1 716 417

Table 4: Calculations on Social insurance and PIT generated by the small hydropower plant in Albania in 2019

WITHHOLDING TAX

According to Law no. 8438, dated 28.12.1998, amended, "On tax on Incomes", a withholding tax is applicable for all business companies that are operating in Albania for a series of categories such as dividends, benefit share, property rent, intellectual and sportive expertise etc. The withhold tax is calculated at the level of 15% of the gross amount.

The majority of companies that are operating in the hydropower sector, are subject to the withhold tax due to their offices rent or external specialized expertise. However, many of their offices are based in the same location as the powerhouse of the HPP. In this assessment the assumption made is that at least half of the companies are considered as subject of the withhold tax. While statistically the withhold tax is estimated to be approximately 300.000 ALL per each company. Thus the withhold tax for the priority producers of hydropower in 2019 is calculated to be € 150.000.

TAX ON INFRASTRUCTURE IMPACT

According to Law No. 9632, dated 30.10.2006, amended, "On the local tax system" tax on infrastructure impact is applied at the rate from 2 to 4 percent of the value of the new investment for constructions in Tirana and from 1 to 3 percent for constructions in other districts. Taking into consideration that this study analysis only the ones under operation there is no tax to be calculated for 2019.

TAXES ON OCCUPATION OF PUBLIC SPACES

According to Law no. 9632, dated 30.10.2006, amended, “On the local tax system,” Municipal Council or Communal Council decides on the level of fee for the use of public space for business purposes and the level of the table tax. They are derived as monthly contribution from the taxpayers in amount of 120 ALL/m² per month for municipality of Tirana and Durres, 90 ALL/m² per month for other large municipalities and 60 ALL/m² and for mid and small municipalities the price goes to 50 ALL/m² for the remainder.

In our case study the majority of HPPs are located in the small municipalities and only 4 HPPs out of 182 are located in Tirana Municipality.

Statistically the average area needed as the construction footprint for the small scale hydropower is approximately 10 m²/kW. Thus, the total amount for the taxes on occupation of public spaces due to the construction of small hydropower plans is calculated at 2.785.677 € countrywide. This tax is collected at municipal level and goes to the budget of the LGUs.

OTHER LOCAL TAXES

Other local taxes of Local Government Units include taxes in accordance with Law No. 9632, dated 30.10.2006, amended, “On the local tax system.

In this chapter the taxes are calculated for each of the companies that are operating in the sector. The average amount of “other taxes” set by the LGUs that might be relevant for the hydropower sector is around 300.000 ALL annually. In this group is the local tax on environment and waste management, tax on advertising billboards, tax on educational infrastructure, green architecture etc.

The total amount for the sector is estimated to be approximately 457.377 € countrywide.

OTHER TARIFFS DERIVED FROM SERVICES AND REGULATION OF THE SECTOR

TARIFFS FOR LICENSING AND REGULATION OF THE POWER SECTOR

All tariffs for licensing on production, trade, supply and distribution of power are paid at the time the license is granted, modified or transferred in the amount of 10,000 ALL. ERE collects annually by the licensee regulatory fees which are derived on the basis of revenue generated from under the licensed activity. These revenues are part of the budget of ERE and are used to cover the operating costs of the institution.

For the year 2019 the price for the regulation fees have not been set by the time this study was carried out. For this reason the estimation is made based on the previous years prices. The technique that was followed in this case is the comparison

of the prices for the regulatory tariffs set by ERE for the production license for the Priority Producers in 2015 and 2016³⁹. There is a fixed tariff for a minimum limit of the annual production that each operator has the obligation to pay to ERE as a regulatory fee. This price starts with 15.000 ALL/annually. The amount is progressively increasing in relation to the total annual production by each operator (company). Thus, the average amount of the regulatory fee for 2019 is estimated to be 0,02 ALL/kWh annually.

Having considered this, the total amount paid by the operators to ERE for the regulatory service for 2019 would be approximately € 238.847.

PENALTIES FOR NON-COMPLIANCE WITH ERE RULES AND GUIDELINES

Penalties for administrative offenses are enforced by ERE in accordance with Article 64 of the Law on Power Sector in force, in case of failure to submit the regulatory reports and the lack of violations of market rules. They range from 0.1% to 3% of annual income.

The penalties system can also generate income to the state institutions due to penalties paid by private/concessionary operators. However, this is an unpredictable budget part and thus has not been considered in this case study analysis.

SERVICE TARIFFS FOR TECHNICAL EVALUATION

National Agency for Natural Resources AKBN collects fees for the technical evaluation services in accordance with CMD. No. 191, dated March 22, 2007 “For the establishment of state technical evaluation for construction projects of HPP under concession”. Fees for technical evaluation are determined in accordance with CMD no. 444, dated September 5, 1994 “On the study fees for the design, supervision and acceptance of construction works”. These fees range from 2.1% to 8.4% of the value of the construction project, in example: for construction projects budgeted at ALL 300 million fees are estimated to be ALL 7.5 million (2.5% * 300 million).

This technical fee as well as other technical services are taking place prior to the operation phase of the hydropower project. Therefore, all the costs that a company calculates as a technical fee for expertise have not been considered in this case study analysis as the study focuses on the operational phase only.

TARIFFS FOR ATRAKO'S SERVICES

Following to the CMD No.150, dated March 22, 2007 “On the organization and functioning of the agency for concessions’ treatment (ATRAKO)”, as amended by Decision 191 dated March 13, 2012, ATRAKO supports the Ministry in evaluating and negotiating concessions and is rewarded by the winning concessionaire when the contract is signed with an amount that ranges from 5,000 euros for projects up to 5 million euros to 30,000 euros for projects over 50 million euros. Until February of 2012, ATRAKO benefited a fee ranging from 1% to 2% of the investment value.

39 Decision no. 16 dated 19.01.2017 of the ERE Board

The table below summarizes the income reported for the purposes of this study, by collecting institutions from the production, transmission and distribution entities operating in the power sector.

Category of tax	Beneficiary institution	Allocation according to Budget	2019
Incomes from concessions, investments and privatization			
Concession fee	MEI	State budget	€ 2.586.254
Penalties for non-compliance with concession and PPP agreement	MIE	State Budget	Not considered
Penalties for non complies with ERE rules	MIE	State budget	Not considered
Fiscal Revenues			
Company Incomes Tax	GDT	State Budget	€ 6.676.682
VAT collected	GDT	State Budget	€ 16.466.419
Social insurance and tax on incomes from employment	GDT	State Budget	€ 1.940.093
Withhold Tax	GDT	State Budget	€ 150.000
Other tariffs from regulation and services			
Tariffs for licensing and regulation of the power sector	ERE	ERE	€ 238.8437
Tariffs for state technical opponent	NANR	NANR	Not considered
Tariffs for services performs by ATRAKO	ATRAKO; MFE	State budget	Not considered
Local tariffs and taxes			
Taxes on occupation of public spaces	LGU	LGU Budget	€ 2.785.677
Other taxes ¹	LGU	LGU Budget	€ 457.337
Total of reported revenues			€ 31.077.674

Table 5: Total fiscal benefits generated by small hydropower sector in Albania in 2019

¹ In this category are included all the taxes and fees set by the LGUs such as environment tax, waste management tax, tax on advertising billboards, tax on educational infrastructure etc.

4.3. SOCIAL COST VERSUS SOCIAL BENEFIT ANALYSIS OF SMALL HYDRO POWER

The wider literature on social benefits, and the underlying rationale for a number of different policy initiatives all suggest a range of different social gains in respect to hydroelectricity. These include:

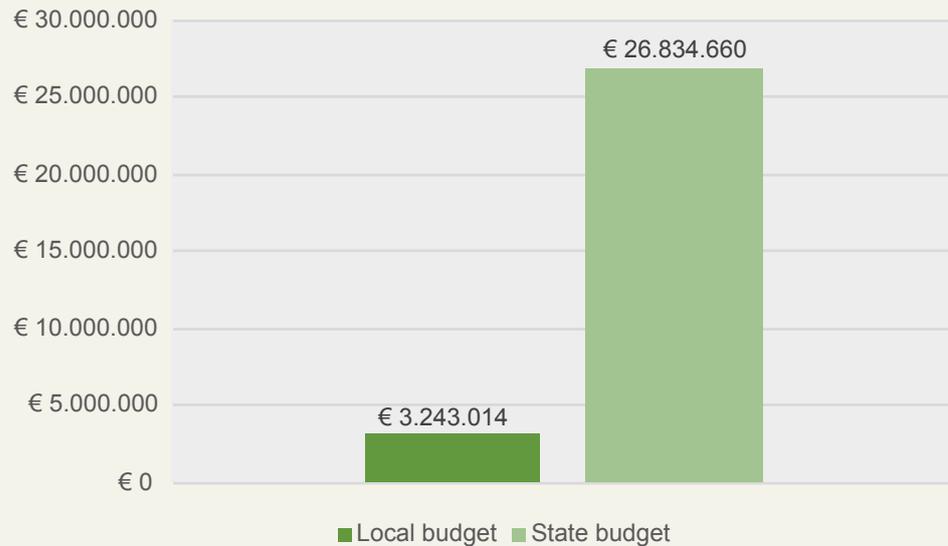
- A positive impact on **capacity and skills development** within the hydroelectricity sector;
- The generation of **new revenue streams** which can be used to subsidise support social facilities and initiatives;
- The strengthening of **social capital** and cohesiveness within community served by the hydroelectricity initiative supported by its income which creates new social linkages and strengthens pre-existing relationships in a community;
- Facilitating **attitudinal and behaviour change** within the wider community.

a) Capacity and skills and development

The development of new skills and development would have been seen as the key benefit for the local communities and calculated under the social benefits. Indeed, many consulting companies have been focused in building skills in project development and implementation of hydropower plants. However, the sector has already advanced all techniques and nothing new can be expected in this area. Most of the employees recruited at local level as seen above are random **unprofessional labour work** during construction and during operation only focussed on **guarding the investment**. Unfortunately, there is no evidence or positive case study undertaken by small HPPs to develop skills of local people, therefore we can't monetise it.

b) Financial support gained

The total labour work benefit for 2019 was € 1.940.093, of which € 699,483 was paid to local employees doing guarding and maintenance work. The rest of €1,240.699 is for desk employers such as economists, technicians, and administrators. Indeed, the overall social benefit of the HPP below 15 MW installed capacity, is rounded to € 31 M.



Graphic 9: Total fiscal benefits generated by small hydropower sector in Albania in 2019 – Distribution by budget allocation

Despite the low benefit this sector has, it is still not equally shared among the central and local government, which is another reason of disadvantage for local communities.

c) Social capital

Social capital relates to the notion that there is an inherent value which exists within social relationships and that this can be a vehicle for progressive social change in the area where the investment is done. In Albania the impact of hydropower has won a negative connotation linked **with conflicts, water missing and dry irrigations**. As such, it is not surprising that the core concept within the community is the widespread recognition of the negative forms that social capital takes in hydropower.

d) Attitude and behaviour

Although, as is noted above, the evidence base is limited, the wider community energy literature does demonstrate that small hydropower development initiatives can impact upon behaviour and lead to the development of more pro-environmental energy consumption patterns. However, there is a lack of proven evidence to show what is the behaviour of the local community in the area where the HPP have been built in Albania.



Graphic 10. Total fiscal benefits generated by small hydropower sector in Albania in 2019

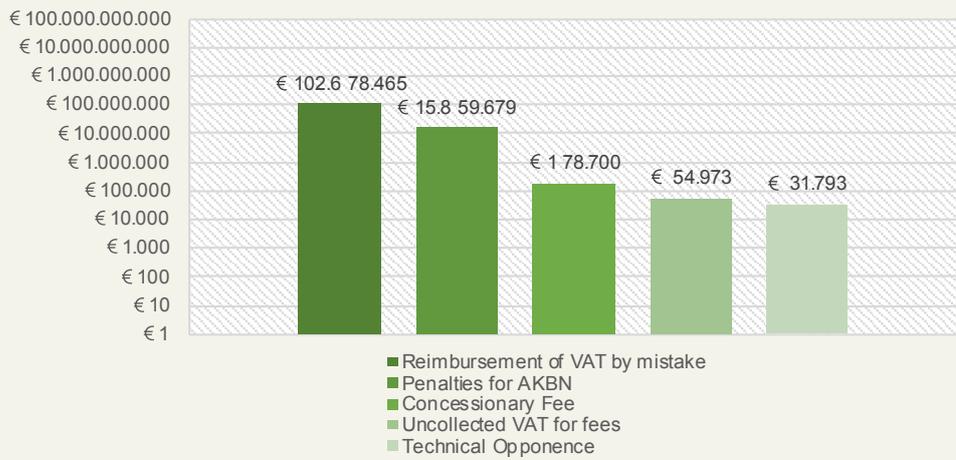
As in any economic sector, there are winners and losers. The **biggest winners** are the HPPs investors and financiers of these companies. Considering that only from the additional payment (**additional coefficient of 1.3 above base price**) of feed-in tariff for 2019 the amount paid to Albanian Priority Producers is € 27 Million.

Taking into consideration that the priority producers will benefit these terms for at least another ten (10) years the amount will be € 270 Million. This is going to grow with new ones that will enter the production system before 31 December 2020.

In the best case scenario for the state budget there is no financial benefit as the total income to the budget paid by the PPs is less 24 M. €, while what the government pays in the forms of feed-in cost is 27M €. Moreover, the local government is not benefiting from the cost of the feed-in system, adding to the negative impact, no social capital, minimum local taxes and social conflict.

4.3.2 IRREGULARITIES AND LEGAL INFRINGEMENTS

Very often, the rapid development of the hydropower sector in Albania in the last decades is not accompanied with the same level of legal and institutional infrastructure development. Thus, the monitoring side is often insufficient due to lack of capacities of the monitoring agencies to identify irregularities and legal infringements cases in the sector. In this regard there are some hidden costs due to these irregularities.



Graphic 11: The outcomes of the Supreme State Audit Control regarding the PPs in 2018

The Supreme State Audit Control (SSAC) undertook an audit to the National Agency of Natural Resources and the Ministry of Infrastructure and Energy for the period July 2016 up to 31 December 2018. The audit was done in 128 projects and the audit control found numerous deficiencies and flaws in the system. As a result, the audit found an economic damage of nearly € 118,803,610. The damage consisted in: undeserved VAT reimbursement of VAT for construction works of HPPs, up collected penalties from NANR to 11 HPPs, wrong calculation of concessionary fee, missed VAT collection for tariffs, and wrong opponents payment done to various HPP subjects. The detailed payment can be found in the graph above. (Source: Supreme State Audit Control. Final audit report on the compliance and oversight of the use of hydro energetic resources. Tirana 2018, p.1-124)

5. CONCLUSIONS AND RECOMMENDATIONS

Despite the interesting and potentially high value of internal structure of the hydropower system in Albania, the reality of the sector currently shows whole dependence on the subsidy system and with that subsidy decreasing year-on-year as FiTs digresses. An annual climb to make installations operational within a higher FiT window is evident (31 December 2020) and several our respondents (AREA)⁴⁰ evidenced some pessimism about sector prospects due to the changing subsidy regime.

- 1) **Based on the research and the presented data in this analysis, it is possible to draw the following conclusions:**
- 2) **The established system of concession fees and incentives for hydroelectricity production in Albania has a low socio-economic justification. The direct benefit from the standpoint of the society is over € 4 million. Meaning that, € 31 M received in the form of tariffs and other benefits minus € 27 M paid back as feed-in tariffs to the companies.**
- 3) **The incentive fees that have been introduced to the promotion of renewable energy in Albania have not brought any change in terms of social or environmental benefit, apart from increased social conflicts among local authorities, habitants, companies, and civil society;**
- 4) **The Priority Producers of HPPs have not changed the national energy security situation which continues to be insecure and dependent upon climate change fragility.**
- 5) **The electricity loss (technical and non-technical) in the distribution and transmission system continues to be still high in Albania at the rate of 1,482,961 MWh (29% of produced energy in the country). The average purchase price for OSSHE for 2019 was 70.9 EUR/MWh.⁴¹ The total bill paid by OSSHE for energy loss in 2019 was 105 Million EUR. Hence, OSSHE is importing energy that is lost in the system.**
- 6) **The research was focussed only on the operational phase of the Priority Producers for 2019. The experts recognise the need for a more robust assessment of the overall economic impact on the construction and operation of Priority Producers in the Albanian Economy.**
- 7) **As Albania is improving the energy losses in the transmission system and is starting its efforts towards the diversification of the energy market, the feed-in system for Priority Producers on hydro-power should be reduced each year, up to total abolition within a 5 years period of time.**

⁴⁰ Skype call with Ms. Anita Shushku, Board member of the Association of Renewable Energy in Albania, on 26 March 2020.
⁴¹ ERE Annual Report 2019.

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