

Challenges, Related to Construction of Hydro-Electro Power Plants (HEPPs) in Tsageri and Oni Municipalities

Preliminary Report





**GEORGIAN
YOUNG
LAWYERS'
ASSOCIATION**



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Terms and abbreviations:

In the order of appearance in the text:

HEPPS – Hydro-Electro Power Plants

EUGAA – EU-Georgia Association Agreement

EIA – Environmental Impact Assessment

GoG – Government of Georgia

MEPAG – Ministry of Environment Protection and Agriculture of Georgia

MESDG – Ministry of Environment and Sustainable Development of Georgia

LEPL – Legal Entity of Public Law

AA – Appropriate Assessment

EBRD – European Bank for Reconstruction and Development

SITUATIONAL OVERVIEW

On December 18/2014, the European Parliament has ratified the EU-Georgia Association Agreement (EUGAA). On the same day, the European Parliament has adopted the Resolution¹ about Georgia, emphasizing on the particularly important matters in the EU-Georgia relations; among others, energy matters and environment protection.

In the Article 46 of the Resolution, the European Parliament: “Calls on the Commission to assist and monitor closely the Georgian authorities in their investment programme for the construction, rehabilitation and reconstruction of hydropower plants, urging them to comply fully with EU standards and norms with regard, in particular, to the environmental impact assessment of the larger plants.”

Following the ratification of the EUGAA, the Government of Georgia (GoG) has started the development of the new legislation. In June 2017, the Parliament of Georgia adopted “Environmental Assessment Code”, for harmonizing the national legislation with the requirements of the EU Environmental Impact Assessment Directive and Strategic Environmental Assessment Directive. The different provisions of the Code are entering force gradually. However, much remains to be done for the establishment of the correct practice of environmental impact assessment. In response to those shortcomings, on November 14/2018, the European Parliament has adopted the Resolution (issued the report) about the implementation of the EUGAA². Along with other issues, the European Parliament emphasized on the environmental protection and energy matters. European Parliament called upon the GoG to develop effective Energy Strategy, to support use of renewable energy and promote energy efficiency; to increase public engagement – and thus, the quality of the environmental decision-making. European Parliament further reminded the GoG of its obligation to comply with the multi-lateral environmental agreement and to improve the quality of its implementation. European Parliament takes into account that the GoG has planned to develop HEPPs further and calls upon the GoG to further to ensure their compliance with the EU standards. Those standards primarily emphasize on the transparency of the environmental impact assessment and ensuring the engagement of all stakeholders in the decision-making process.

Currently, construction of a number of HEPPs is ongoing in many regions of Georgia – including in Racha and Svaneti. Despite a number of obligations and recommendations issued towards Georgia, such construction creates certain problems from the environmental point of view and causes challenges on the individual level, in terms of human rights violations.³

Considering all of the above, Georgian Young Lawyers’ Association (GYLA) and its partner Green Alternative (GA), have planned research of the HEPPs construction documentation (scoping report) for ongoing construction in Tsageri and Oni municipalities. The research was performed based on the EU legislative framework and guideline documents. The research has given the possibility to examine the challenges, negatively impacting the environment. The research was carried out within the project “Supporting Community-Oriented Development in Mountainous Regions”.

¹ European Parliament non-legislative resolution of 18 December 2014 on the draft Council decision on the conclusion, on behalf of the European Union, of the Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Georgia, of the other part (09827/2014 – C8-0129/2014 – 2014/0086(NLE) – 2014/2816(INI)) available [here](#);

² European Parliament resolution of 14 November 2018 on the implementation of the EU Association Agreement with Georgia (2017/2282(INI)), available [here](#);

³ <https://gyla.ge/ge/post/adamianis-uflebebze-da-garemosdacvit-sakitkhebze-momushave-organizaciebis-ganckhadeba-tchubershi-sheqmnil-krizistan-dakavshirebit#sthash.4IQyzabu.dpbs>

We hope that the elaborated remarks will positively contribute to resolving the problems, identified in the ongoing construction process of HEPPs in Georgia.

METHODOLOGY

In examining the scoping report and preparing feedback, we used two questionnaires, developed for the assessment of scoping reports. The first questionnaire allows to examine the level of compliance of the scoping report with the Environmental Assessment Code requirements. The second questionnaire is the adaptation of the similar questionnaire of the EU, which is widely used for the assessment of the quality of the scoping report, for the assessment of the impact of works, and provides information about the necessary research and methods for the Environmental Impact Assessment (EIA).⁴ Specifically, we used the control questions for EIA assessment (Checklist), which are developed in accordance with the Georgian legislative requirements (Environmental Assessment Code, etc.), EU framework - Guidance on the preparation of the EIA Report (Directive 2011/92/EU as amended by 2014/52/EU)⁵, as well as the Environmental Assessment Methodology of Rivers in Georgia (2017), developed within USAID-funded G4G project.

REMARKS AND GENERAL FEEDBACK REGARDING THE SCOPING REPORT ABOUT THE CHANGES TO THE PROJECT OF NAMAKHVANI HEPPS CONSTRUCTION AND EXPLOITATION

On June 17/2019, the Ministry of Environment Protection and Agriculture of Georgia (MEPAG) published the scoping statement on its website – regarding the amendments, introduced to the project of construction and exploitation of lower Namakhvani HEPP of LTD. Enka Renewables. July 9/2019 was determined as the deadline for presenting stakeholder feedback; however, MEPAG failed to hold public discussions about the scoping report, violating the timeframes of the legislation.

Ministry of Environment Protection and Natural Resources (predecessor of MEPAG prior to institutional reform) has issued the ecological expertise conclusion #73 on December 25/2015 (about the Namakhvani HEPP cascade project). Based on this conclusion, the legal entity of public law (LEPL) Technical and Construction Supervision Agency under the Ministry of Economy and Sustainable Development of Georgia (MESDG) has issued the construction permit.

On February 14/2019, MEPAG issued the statement about the screening decision on the introduced amendments to the project of Hamakhvani HEPP cascade construction and exploitation (change of the exploitation conditions).

The screening statement indicated that the company has carried out the project optimization works, for the elaboration of a detailed project of HEPP cascade construction. During the optimization process, the decision was made to introduce amendments to the initial version of the HEPP cascade project. According to the screening statement (which is reflected in MEPAG screening decision), amendments are introduced

⁴ Environmental Impact Assessment of Projects Guidance on Scoping (Directive 2011/92/EU as amended by 2014/52/EU). Implemented for the European Commission by COWI A/S and Milieu Ltd. The main authors: Paola Banfi, Adrien Lantieri, Jennifer McGuinn, and Alicia McNeill from Milieu Ltd. No ENV.F.1/FRA/2014/0063, implemented for the European Commission by COWI A/S and Milieu Ltd. © European Union, 2017 (<http://ec.europa.eu>).

⁵ http://ec.europa.eu/environment/eia/pdf/EIA_guidance_EIA_report_final.pdf

to the projects of both major HEPPs of Namakhvani cascade. At the same time, the HEPP (formerly known as Tvishi Hepp – as reflected in 2015 ecological expertise conclusion), is referred to as “Zemo Namakhvani HEPP” (Zemo – or upper in Georgian) in the new documentation, presented by the company. At the same time, formerly known Namakhvani-Zhoneti HEPP (as reflected in 2015 ecological expertise conclusion), was renamed as the “Kvemo Namakhvani HEPP” (Kvemo – or lower in Georgian) in the new documentation of the company.

MEPAG has reviewed the screening statement, as well as the presented comments of NGOs - GA and Georgian Green Movement/Friends of Earth and concluded that the amendments to the 2015 project will cause significant change to the exploitation conditions, which may cause increased geological, physical and biological risks and therefore, represent a significant environmental impact. Considering this, the screening decision was made that the introduced changes to the Namakhvani HEPP construction and exploitation were subject to the EIA, in accordance with the Environmental Assessment Code (Article 7, part 6 and Article 5, part 12).

In response to this screening decision, the company prepared the scoping report only for Kvemo Namakhvani HEPP. Thus, the company has failed to carry out the obligations, indicated in the screening decision.

Presenting and approving the EIA in this condition will lead towards having three (3) EIA reports and their relevant permit documentation: 1) JSC. “Namakhvani” – 2015, Rioni river HEPP cascade (Tvishi HEPP 100 MW, Namakhvani – 333 MW) – construction and exploitation project; 2) LTD. “Enka Renewables, Kvemo Namakhvani HEPP construction and exploitation – amendment project and 3) LTD. “Enka Renewables” Zemo Namakhvani HEPP construction and exploitation – amendment project.

Considering above, no matter how formally correct those three reports are (which is impossible, even in theory), they cannot fulfill the role of EIA, as a preventive environmental management instrument, which must be a framework and an evidence-based operational tool. If we assume that it is acceptable to have three distinct EIA reports for the same scope of work (in this case – Namakhvani HEPP cascade), it will be impossible to achieve the fundamental purpose of EIA – mitigating negative impact of works on the environment. This will cause complete chaos in terms of reporting and control over implementation of all three permit documentation packages.

Therefore, it is important that the MEPAG does not allow such dangerous precedent and request the investor to present a unified scoping report of the Namakhvani cascade HEPPs and prepare a unified EIA based on that.

If the changes are introduced to the Kvemo Namakhvani and Zemo Namakhvani HEPPs as separate projects, then the baseline project also requires changes, to ensure that all three projects reflect the cumulative impact. This practically means that three different EIA have to describe the combine cascade impact on natural and social environment – or, overall, the company will have to perform more work, with less efficiency, than it would have done with only one combined EIA report about entire Namakhvani cascade.

Screening statement and scoping report presented in 2019 once again make it clear that the 2015 EIA report is very incomplete, its quality is low and it should not have been given a positive ecological expertise conclusion. The scoping report itself “confesses” that the 2015 ecological expertise conclusion and

construction permit were issued in 2015 “based on technical-economical justification” (and not based on real environmental impact assessment) and that detailed research for various environment components was not conducted (including geological and geodynamic risk research, as well as biodiversity impact assessment). Therefore, selection of the alternative was determined neither by security, nor by environmental considerations. Scoping report indicates that the document adopted in 2015 is based on the data of the research, carried out in the past century – in the Soviet times.

Scoping report does not cover the entire project. In addition to omitting the Zemo Namakhvani HEPP, nothing is mentioned of the placement/location of the HEPP-associated infrastructure and its impact (for example, there is no mention of the location for the electricity station or construction camp). The alternatives for different placements of HEPP infrastructure are not comprehensively described in the report (only alternative placement for power plant is indicated).

Report presents physical characteristics of the HEPP, however, there is no information on monthly turnout, nor information about electricity network parameters and routes, nor average multi-year flow usage (percentage of usage).

Information, presented in the scoping document, regarding the necessary methods for EIA preparation is too general, there is no description of methodology for each specific environmental component. Some methods are defined incorrectly (water usage, habitat assessment). There is no description of the research period for each environmental component either (in which season, which month allows for comprehensive research, and for how long).

Proposed mitigation measures against negative environmental impact are inconsistent, are not founded on pyramide principle of the environment impact mitigation, because prevention and compensation activities are not indicated.

Report omits the information about ecosystems, ecosystem services, habitates. It must be mentioned that the information on species is copied from the 2015 EIA report, therefore cannot be relevant. At the same time, the report omits the list of various endangered species under the project, safeguarded under various conventions.

According to the sub-paragraph 4.1.5 of the scoping report, the project will not impact protected territories, because they are on a significant distance. According to it, EIA will not assess the impact on the protected territories. This is critically contradicting the legislation – Environmental Assessment Code, Article 8, clause 3, sub-clause b.a, which gives possibility to issue negative conclusion on the scoping (for details, see the questionnaire).

There is absolutely no examination of the impact of the air emissions, noise and vibration on the biodiversity; therefore, it is incorrectly assumed that the impact will be “very low” (scoping report, table 4.2.4.1).

Contamination, characteristic for the water reservoirs, is not taken into account in examination of the impact on the surface and sub-terranean waters (biomass decay, etc.). The report does not take into account that the region is characterized with large amounts of karstic formations and sub-terranean waters, where drilling, explosive works and change of hydrological regime will cause significant changes.

Minimal ecological expenditures were calculated in reality through Soviet period, so-called “Sanitary Costs” methodology, instead of contemporary method, which would have been compliant with the EU water framework directive.

Chapter 4.1.9 of the scoping report indicates that so-called “Eco-HEPP” will operate from the so-called eco-cost of the HEPP. This means that none of the fish species will survive, because they will die in the turbines of this “Eco-HEPP”. Thus, the effectiveness of “Eco-HEPP” must be questioned.

The report does not examine the impact of washing the reservoir twice a year – its effect on the fish and other live organisms within the river (chapter 4.1.10).

There is no evidence/justification for the statement that there are no risks in terms of changing the amounts of sub-terranean water reserves (scoping report, chapter 4.1.11). (სკოპირების ანგარიში, თავი 4.1.11). It must be emphasized, that no detailed geological research has been conducted so far. At the same time, incomplete examination of this issue by the companies “Clean Energy” and its contractor “Gama” have caused numerous problems in “Shuakhevi HEPP” project, which caused loss of water in many villages and has caused one of the largest energy breakdowns in the history of Georgia.

It is incorrect to assume that the project will have no impact on the accessibility of water resources, because the 2015 research did not examine this issue through the applicable methodology (scoping report, chapter 4.1.12). For the same reason, assumption that the project will have no impact on the biological environment of the water – is incorrect (scoping report, chapter 4.1.13).

Summary of the anticipated impact (scoping report, tabe 4.2.11.1) indicates only industrial breakdowns, as if a large HEPP project has an impact only in cases of breakdowns. Impact on ichthyofauna is examined only from the point of view of illegal fishing, saying nothing of HEPP-induced impact.

The report completely omits the impact on agro-biodiversity and agriculture, despite the fact that it directly affects agricultural land-plots (flooding, changing the type of soil usage).

Fauna lists are based on approximate assumptions, which require detailed examination at the EIA stage.

In the context of visual impact, there is no examination of the processed rocks and other industrial waste, produced during the works.

Socio-economic impact assessment omits quite important issue – negative impact of the project construction and exploitation on the tourism in Lechkumi, Racha and Kvemo Svaneti, as well as the Promete caves (transportation flows caused by construction, increasing traffic). The report also omits negative impact on the small and medium businesses (wine producers, cellar owners, family guesthouses/hotels) – the risks of flooding, loss of land plots, damaging unique microzones of vine, noise and vibration contamination caused by construction, dust, loss of ecosystem regulators – pollinating insects – are completely ignored. Therefore, impact on the local economy and population, their living conditions – is assessed in a biased manner, incompliant with the requirements of the legislation.

The table of mitigation measures – is completely irrelevant. A number of impact points are simply ignored (those related to biodiversity and ecosystem services, drilling/explosive works and their impact on karstic caves and sub-terranean waters, acidity of water and impact of concrete production, riverbank flora degradation, drastic decrease of water reserves in natural riverbeds, impact on agro-biodiversity/local types of vine, contamination of surface waters due to the reservoir, HEPP-related infrastructure – transfer points, sub-stations, fragmentation of habitats, their degradation, hazards for other elements of biodiversity, etc.). None of those issues are examined, no compensation measures are proposed by the company for lost and damaged habitats (“enhancing green spaces as possible” cannot be considered a serious compensation measure for removing flora for construction territory. In these cases, revival of natural habitats must be carried out adequately).

Conclusions about the expected positive impact of the project are very vague. The report does not provide specific quantitative data, nor information about the number of persons to be employed – both during construction and exploitation phases. Furthermore, the document omits the issue of compensating physical and economic re-settlement. Therefore, it is difficult to judge, whether the project will improve the living conditions of local communities.

In order to enable the stakeholders to understand the socio-economic impact of the project, it is essential to describe the villages and their list, which fall under the project area. The document entirely omits this part. Project implementation requires physical and economic re-settlement. Therefore, communities will have limited access to resources. Such impact on local population must be examined.

The report describes the impact of the project on human health; however, incompletely. For example, the report does not examine the impact of increased humidity on human health. The report also omits the impact of drilling/explosive works on the environment and the population. Throughout the entire text, the standards of citation are violated; therefore, it is impossible to verify the sources.

Therefore, we think that because of the non-compliance with the Environmental Assessment Code and negligence towards the screening decision, a negative conclusion must be issued towards the presented scoping report.

In addition to the above, it is essential to point out to the company that:

The company must develop the new EIA of all works, which must cover all HEPPs – Zemo and Kvemo Namakhvani HEPPs and all related infrastructure, including so-called baseline project impact. Overall, 2015 project-related permits must be abolished and one (and not three) environmental decision must be made on the unified/cumulative project. It must be taken into account that the company has still not provided the documentation, requested in December 25/2015 ecological expertise conditions, such as: zoological research, biodiversity revival and compensation plans, monitoring plan, epizootic research, karstic cave research, geodynamic process research, etc. There was no research on the impact on the unique types of the vines and its microzones, farming nor family cellars (the situation has significantly changed since 2015 – number of successful family cellars has increased; many families are exporting wines and participated in governmental programs for the support of farming).

Those circumstances form a solid justification to request the company to present a comprehensive EIA report for the adoption of the new environmental decision.

Apart from the EIA report, the company must present so-called Appropriate Assessment (AA), which will examine the project impact on upper and lower parts of the Emerald Sites. HEPP placement in the upper part of the river, may cause significant impact on the Emerald Sites, located in lower parts of the river (water flow and sediments, contamination, or violation of fish migratory routes – see European Commission, 2018. Guidance on The requirements for hydropower in relation to Natura 2000). Appropriate Assessment must be prepared at the early stage. It must be taken into account that the river Rioni is the only habitat of the Atlantic trout, safeguarded under the Bern convention. It is known that the European Bank for Reconstruction and Development (EBRD) expert has examined the project impact on the trouts and has negatively assessed the project.

In the EIA report, prepared in 2015, the assessment of the environmental loss of the river is calculated by the Soviet period standards, meaning that 10% sanitary level of river will be remaining in the riverbed. It must be pointed out to the company that it must apply “Guideline Methodology for the Assessment of the Environmental Loss of the Rivers in Georgia.”⁶

As mentioned above, we applied two questionnaires, for the assessment of the scoping report. The compliance assessment of the scoping report against the legislation has clearly revealed that the scoping report omits numerous requirements of the Environmental Assessment Code (Article 8, Clause 3); mostly, issues related to protected territories and mine-related issues. Therefore, the Ministry has a justified foundation to issue a negative conclusion on the scoping report. The company has a right to update and provide the new scoping report. At the same time, the presented scoping report does not take into account the screening statement/decision of the Ministry and its requirements and there is no justification for such omission. Important parts of the scoping report are performed in a very low quality. Its assessment by adapted EU questionnaire has clearly demonstrated the shortcomings of the scoping report and the volume of the preparatory works for the EIA report.

REMARKS AND COMMENTS ON THE CONSTRUCTION AND EXPLOITATION PROJECT OF ONI HEPPS ON RIVER RIONI AND ITS EIA REPORT

JSC.Oni Cascade plans implementation of Oni HEPP cascade construction and exploitation project. The planned works cover: “In Oni municipality, on river Rioni, usage of hydroenergy potential through the hydrotechnical infrastructure, arranged at the mark z.d. 1095.5-669.2 m. HEPP cascade for the project will be two-layered. The first layer (Oni 1 HEPP) will be arranged between z.d. 1095.5-832.1 m marks and the second layer (Oni 2 HEPP) will be arranged between z.d. 770.5-669.2 m marks.

On January 1/2018, the website of the Environment Protection and Agriculture Ministry was updated with the statement: “In Oni municipality, JSC Oni Cascade EPP construction and exploitation project EIA will be discussed during the public gathering.” According to the statement, public discussion must have been held on February 19/2018, at 14:00, in the administrative building of the Oni Municipality Mayor’s Office. Website included the preliminary version of the EIA report, technical summary, and non-technical summary. According to the statement, preliminary version of EIA report and relevant detailed information about the planned works was also available in the offices of the MEPAG, Oni Municipality Mayor’s Office and environmental consulting organization – ltd. Gama Consulting offices, in Tbilisi.⁷

⁶ US Agency for International Development (USAID) project: Governance for Growth - USAID/G4G; Deloitte Consulting, Georgia’s Environmental Outlook, February 2017, editor – Giorgi Chikovani, Ketevan Skhireli, Mariam Bakhtadze.

⁷ <https://mepa.gov.ge/Ge/PublicInformation/53>

MEPAG website was updated with one more statement on February 18/2019, along with the project-related documentation. According to the statement, stakeholders had possibility to submit written remarks and comments regarding the EIA report, to the MEPAG, before March 1/2019. The statement indicated that the administrative proceedings are carried out in accordance with the Environmental Assessment Code, Article 48, part 1, according to which the decision on the administrative proceedings that started before January 1/2018, in accordance with the Environment Impact Permit Law, must be adopted in accordance with the permit issuance rule that was in force before January 1/2018. Law of Georgia on Environmental Permit does not impose obligation upon the administrative body – in terms of publishing the statement on the official webpage (regarding the adoption of environmental decision). Despite this, MEPAG must ensure that the public is informed, through updating its webpage. In addition, MEPAG must define the deadline for receiving public remarks, considering the administrative procedure timing.⁸ Attached EIA report indicated that: “In order to inform local self-government bodies and population, on September 9/2016, at 15:00, public meeting was held in Oni Municipality Culture Center Building, where public review of the preliminary EIA report about Oni HEPP Cascade was held. Meeting was attended by the Georgia’s Co-Investment Fund and LTD. “Peri” representatives, ltd. “Gama Consulting” representatives, Oni Municipality City Council and Gangeoba representatives, local population and other stakeholders. HEPP Cascade Final Public Review was held on February 19/2018, in Oni Culture House building. The meeting was attended by local population, representatives of local self-government, NGOs, representatives of MEPAG and others.” The document did not attach any evidence of holding those public events. There was only the table, present “the information about the remarks and feedback, received during the public review process.” This table only included the remarks by the MEPAG.

GA has addressed MEPAG in writing, regarding the statement published on February 18/2018. It indicated that according to the attachments of the above statement: “LEPL Technical and Construction Supervision Agency head, has addressed MEPAG on February 15/2019 and informed them that the Agency has received the statement #15/13.02.2019 from the JSC Oni Cascade (along with attached documentation), which is related to 206.1 MGWT Oni HEPP cascade construction in Oni municipality, Rioni river and requested review of the adoption of the environmental decision.”

Presented documentation shows clearly that the administrative proceeding has started based on the February 15/2019 statement of the head of the LEPL Technical and Construction Supervision Agency. Thus, it is unclear, why the Ministry applies the provisions of the Environmental Assessment Code/Article 48/part one and plans to adopt the decision based on the law that was abolished on January 1/2018. It must also be emphasized that according to the Environmental Assessment Code, environmental decision-making requires the company to address the decision-making body. Therefore, the Ministry was not authorized to review the statement of the LEPL Technical and Construction Supervision Agency, and must have explained the legal procedures to the permit-seeker. In case if indeed, the statement requesting issuance of environmental impact permit was submitted to the Ministry before January 1/2018 (based on which the Ministry launched administrative proceedings) it is unclear – based on which regulations were those proceedings held (which last for minimum 14 months). As it is known, according to the Environment Impact Permit Law of Georgia, Article 9 (about rules of permit issuance): “The Ministry makes decision regarding permit issuance, based on the General Administrative Code of Georgia, chapter VI – simplified administrative procedure and according to the Law of Georgia on Licenses and Permits, within 20 days following the receipt/registration of the permit request.” If however, the administrative procedure was

⁸ <https://mepa.gov.ge/Ge/PublicInformation/11399>

held in grave violation of Environmental Impact Permit Law, License and Permit Law, and of General Administrative Code, and if it still lasts for a quite long time, it is unclear why did Ministry only provide 12 calendar days for public engagement.

GA has pointed out to the Ministry that: **“All of the above gravely violates a number of laws and conventions, which must be resolved by the Ministry in a timely manner and this completely illegal process must be stopped, its sole reason being to give the company the possibility to circumvent its obligation on detailed examination and answering legitimate public questions.”**

On February 25/2019, MEPAG website was updated with new statement regarding the Oni HEPP Cascade project. The statement indicated that: “On February 15/2019, Ministry of Economy and Sustainable Development of Georgia has presented statement #04/238 to the MEPAG, regarding the adoption of environmental decision. MEPAG has addressed the Ministry of Economy and Sustainable Development of Georgia with the letter (#1678/01), requesting to prolong the administrative procedure of adopting the environmental decision – until April 25/2019. On February 22/2019, the Ministry of Economy and Sustainable Development of Georgia issued an order (#36-04), prolonging the administrative procedure until April 25/2019.” Due to prolongation of the administrative procedure, the deadline for presenting the written remarks and comments on the EIA report (to MEPAG) of the project was also prolonged - until April 19/2019.⁹

After this, the project continued unclearly. On June 14/2019, Oni Municipality Mayor’s Office facebook page was updated with the statement, titled “Oni HEPP Cascade Project Presentation”. It indicated that: “JSC. Oni Cascade and Oni Municipality Mayor’s Office are inviting you to the Oni HEPP Cascade Project Presentation.” The announcement indicated location – Oni town, June 18/Tuesday, 13:00, at Giga Japaridze Oni Culture Center. According to the statement: “Attendants of the presentation will receive detailed information about the project and will be shown project animation/cartoon. Last part of the event will be dedicated to the question and answer session. Transportation of the population will be provided by the JSC Oni Cascade. For the detailed information, please address Mayor’s representative in administrative units.” The statement did not indicate, whether this presentation constituted the legally binding EIA report’s public review. There was no document attached for preliminary review either.

In a few days, the same facebook page was updated, indicating that: “On June 18, in Oni municipality/Giga Japaridze Culture House, the public presentation of Oni Cascade project was held; the meeting was held in question-answer format, video/cartoon about the project was presented and information brochures were distributed.” Attachment included the photo materials.¹⁰

Project has not been continued following these developments. On August 31/2019, Green Alternative has addressed the LEPL Technical and Construction Supervision Agency (Agency hereinafter) under the umbrella of Ministry of Economy and Sustainable Development.

Agency has informed the organization that: “at this stage the construction permit is not issued and administrative procedure of permit issuance is ongoing, which will continue until December 18/2019, in accordance with the governmental decree of September 2/2019, #1932”. This answer had the attachment – copy of the decree itself.

Thus, the situation around Oni HEPP cascade project is quite vague. There are facts of infringements of law, related to the public engagement and the rules of administrative procedure.

⁹ <https://mepa.gov.ge/Ge/PublicInformation/11416>

¹⁰ <https://www.facebook.com/www.oni.gov.ge/photos/pcb.2268486053240775/2268482639907783/?type=3&theater&ifg=1>

Considering above, the procedures on this project must be carried out according to the Environmental Assessment Code, Chapter 2.

Despite these vague circumstances, we prepared comments and remarks regarding the EIA published in 2019.

Control questions were grouped in seven (7) sections:

1. Project description (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clauses a, b, z);
2. Description of environmental factors/components, which may be affected by the project (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clause a.a.; Article 5, clause 4; Article 10, clause 3, sub-clause g, and others);
3. Anticipated impact of the project, on various factors/components of the environment (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clauses g, d, e, and i);
4. Alternatives (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clauses b and z);
5. Impact mitigation and compensation activities (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clause v);
6. Monitoring (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clause t);
7. Quality (relevance with Environmental Assessment Code, Article 10, clause 3, sub-clauses k, l and m).

Assessment has revealed that:

- Importance of the project is justified in a very shallow manner. There is no information about project expenditures and project income, as required under the Environmental Assessment Code, Article 10, clause 3, sub-clause z. Such requirement existed in pre-2018 edition of the legislation (bylaw on the adoption of the “Environmental Impact Assessment” (#31, 15/05/13), Article 5, Article 6).
- The report describes various stages of the project implementation, however, without any timeline. It is only indicated that the construction period will take four (4) years. the project lifecycle is 50 years. Nowhere does it indicate the start date.
- Major qualities of the project and the impact on environment components is described in detail for only one of the alternatives. The essence of the non-activity alternative is perceived incorrectly by the authors.
- No technological alternatives are described. For example, only one type of turbines is described (Pelton type for Oni 1, Francis type for Oni 2), without any assessment of the environmental risks, caused by each.
- The report indicates that the new infrastructure will be developed (roads, etc.) and new businesses (collection of inert materials, transportation, etc.), without any assessment of its impact on biodiversity/environment.
- There is no analysis of cumulative impact, through conjoined effect of other planned infrastructural and energy projects, among others – electricity wire-network, arranged for Oni HEPP cascades.

- There is no description of “comprehensive package”, as the description omits HEPP-related and HEPP-enabling activities (road construction, electricity network arrangement, ropeway construction, etc.).
- Project construction will trigger creation of new transport infrastructure and significant transportation flows, however, its impact on biodiversity and ecosystems is not assessed.
- Information about the applied resources and natural resources is very limited. It is mentioned that “inert materials” (sand, gravel) will be mined from river Rioni riverbed/gorge and it will be purchased by the existing license-holders/construction contractors. It is possible that contractors may arrange their own new mining pit/quarry (another license may be issued for natural resource mining in this case). There is no estimation of the amount of inert materials that are being obtained under the current license-holders, no estimation whether this will be enough for the project, whether those natural resources will be available to others, what is going to be the impact of such mining on the environment.
- The methodology and the time dedicated for the research does not confirm to the needs/ is insufficient for providing objective and comprehensive evaluation. For example, according to the EIA research of the spineless species was conducted for only two (2) days, in bad weather. Octological research was conducted only during one season, October 2016.
- The hydrological characteristics of the level of the river flow and major river flows and connections within the project (average multi-year cost, seasonal costs, etc.) are assessed based on quite outdated data (hydro-post Glola data from 1942-1957; hydro-post Utsera data from 1959-1986; hydro-post Oni data from 1935-1990). Nothing is mentioned about the usage of ecosystems services. The number of research locations for assessing environmental costs is insufficient. Soviet period methodology is applied (instead of contemporary methodologies described in EU directives) –“Major Project and Construction Rules” - СП33-101-2003, “Определение основных расчетных гидрологических характеристик”. Therefore, only one option of water usage is described (so-called “10% option”).
- Sediment estimation is based on outdated data and theoretical calculations. Only one granulometric analysis is performed (in upper part of the hydro-post Oni of Rioni river, 2016/06/22).
- Types (their populations and habitats), habitat types, which may be affected by the project are described with mistakes. Botanical and zoological part includes contradictory statements.
- In botanical part, some habitats are mentioned as “habitats of low conservational value”. However, with high likelihood, those territories include habitats, safeguarded under the Bern convention (such as G1.1. Riparian and gallery woodland, with dominant Alnus, Betula, Populus or Salix, G1.12 Boreo-alpine riparian galleries, G1.6 Fagus woodland, G1.6H, C3.55 Sparsely vegetated river gravel banks, C3.62 Unvegetated river gravel banks). Therefore, habitats, referred to as “habitats of low conservational value” may be safeguarded under the Bern permanent convention (Resolution #4), as highly protected habitats.

Our argument is strengthened by the zoological part of the EIA, which indicates that “Five (5) major habitats were identified during the research, within the project coverage – in accordance with EUNIS habitat classification”:

1. Regularly or newly processed agricultural land, yards and home gardens;
2. G1 broadleaved forest;
3. G1.1 Riparian and gallery woodland, with dominant Alnus, Betula, Populus or Salix;
4. G4.6 Mixed Abies - Picea - Fagus woodland;

5. C3.55 Sparsely vegetated river gravel banks.

Considering the above, it is completely unjustified and irresponsible to argue in the EIA report that “HEPP cascade project does not cover the critical habitats and therefore, none of the critical habitats will be lost.”

- The region does not have protected territories yet; however, it is planned to create Racha National Park – protected territory, which is mentioned very lightly, and the project impact is not assessed.
- The report mentions the three emerald sites of the region and says that because they are on a distance from the project territory, the impact assessment on them is not conducted. Sites in the lower part of the river are not reviewed either.

As mentioned, Oni HEPP cascades are planned in the riverbed of river Rioni, lower part of which includes “Emerald Net” sites, Ajameti managed reserve and Kolkheti national parks. At the same time, river Rioni is the only habitat of the Atlantic sturgeon, safeguarded under the Bern convention (creation of the new “Emerald Sites” and works for protection of this habitat are underway, as one of the obligations under the Bern convention). Considering this, it is necessary to prepare so-called Appropriate Assessment (AA). EUGAA obliges GoG to implement the AA of all projects, which may have significant impact on the territories, included in the Emerald Net. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora indicates that AA must be carried out for every plan or project, which may have significant impact on the territory of Natura 2000 (in case of Georgia – on the Emerald Net, whether separately or cumulatively with other plans or projects). This covers not only objects, located within the Emerald Net, but also objects beyond its borders, which may impact this Emerald Net. The fact that the project is not located inside the Emerald Net, does not allow to conclude that compliance assessment is unnecessary. HEPP placement may significantly impact the watershed or the lower part of the Emerald Net territory (see European Commission, 2018. Guidance on the requirements for hydropower in relation to Natura 2000). Thus, compliance assessment must be carried out at the very early stage.

According to the project, power units of both HEPPs will be provided with water through the tunnels and lower parts of the plant are expected to significantly decrease in water turnout (in case of Oni 1 HEPP, about 14.5-15 kilometers of Rioni river fall under the project impact zone, in case of Oni 2 HEPP, about 9.5-10 kilometers fall under the project impact zone). In other words, in the coming 50 years of project functioning, 25 kilometers of the Rioni river will drastically decrease in water turnout. Project description has recognized that this must be considered a high-level impact on the biological environment.

Such impact will be particularly damaging for the fish species. The EIA report indicates that as a result of the project implementation “timing the water flow disrupts the conditions, essential for existence and reproduction of fish species. Hydrological, thermal, hydro-chemical and feeding conditions change, conditions for reproduction and feeding of both types of migratory and semi-migratory fish significantly change.”

EIA report recognizes that zoological, especially ichthyofauna-related issues “are insufficiently examined. This is why it is difficult to assess the scale and speed of the reaction of the increasingly damaged ecosystem and biodiversity of the river. It is also unknown currently, whether there is a redline, beyond which critical impact does not increase, with the construction of additional HEPPs.” The report also indicates: “impact on water ecosystem and its biodiversity represents a complexity of cumulative effects and therefore, forecasting the impact is difficult, due to lack of information or insufficient nature of the

information.” Such a “confession” is the precondition for the Minister of Environment Protection to reject the proposed project, because it is impossible to establish with such insufficient data, that implementation of such project in the given location and conditions will not certainly cause a serious and irreparable damage of the environment and natural resources.

The project indicates that: “relevant mitigation measures – if implemented effectively and permanently monitored, allow to lower the impact on terranean animals down to the “medium” level.” However, incomplete EIA and proposed mitigation measures do not allow to conclude that they will be effective.

Ichthyo-habitat/fishery is indicated only in the technical part of the EIA, where it is indicated that the HEPP ichthyo-habitat is planned in consideration of the existence of the trout at the territory of the project implementation.” However, zoological part mentions existence of the stream trout (*Salmo trutta morfa fario* Linnaes, 1758), Kolkhetian Barbel (*Barbus tauricus rionica* Kamensky, 1899), Napota/Rutilus (*Rutilus rutilus*, Linnaeus, 1758) and Caucasian Herring (*Squalius cephalus*, Linnaeus, 1758). It also indicates other types of fish, which reside in this area, according to literary sources. Therefore, fisheries for trout may be ineffective for other types of fish, which have different kind of mobility and size. Zoological part of the report (sub-paragraph titled “Death of Fish in Water Receiver and Watershed”) mentions that “letting the fertile fish move through will be ineffective, unless protection equipment is arranged for fish in water receivers and watersheds.” Such statement is ambiguous and does not allow to conclude, whether the company undertakes the obligation to install such protective equipment for preserving fish species.

Tsava fish population and habitat are insufficiently examined (Tsava fish is safeguarded under the Bern convention and the Red List of Georgia). Major hazard for this species is lack of food sources, caused by decrease in river level. In this context, proposed mitigation measure is completely inadequate.

The project documentation “confesses” that: “in the impact areas, including forests, it is impossible to revive the original natural groves or to maintain them in the pre-construction condition. This is why, in such cases it is recommended to carry out offset activities, which means revival of equivalent forest habitats or other type of ecosystem/flora.” However, the same documents copy the same phrases of company “Gama” from a number of other reports, such as “no-loss”, “pure profit principle” and “habitat-hectare” approaches. Usually, eco-compensation issues are reflected in EIA documents with such formulation, for creation of a certain illusion – that the environmental damage is properly compensated.

Usually, such concepts are indicated in EIA documentation in a very illogical and formalistic manner. Practically, there are no known cases of application of this methodology following completion of HEPP construction, which is always ignored by the relevant Ministry.

The project territory is located in seismically active region (“research territory – central part of the Caucasus is seismically active zone.”). This territory falls under a nine-point (9) seismic hazard zone.

Oni 1 HEPP tunnel will cross three major cracks, which may cause inflow of large masses of water. There is also a likelihood of proximity of the cracks with weak rock masses. The project territory most likely includes karstic formations; „during the construction of a tunnel, crossing the karstic formations may cause serious problems, such as unexpected inflow of large masses of water, creation of empty pits and degradation of rock masses.” EIA report indicates that “at this stage, information is not available regarding the following parameters of the rocks: sub-terranean water level, resistance to water penetration, directions of cracks and deformations of rocks at the level of tunnels.” Issuance of construction permit without examination of

such data has caused the greatest energy breakdown in the history of Georgia, caused by industrial failure of Shuakhevi-HEPP. It is notable that in that case too, the EIA report was developed by the company “Gama”.

EIA report suggests to carry out research after issuance of environmental permission (as it happened in case of Shuakhevi-HEPP and a number of other cases); “it is necessary to conduct more laboratory research for the assessment of the different types of rocks, which will be based on accurate statistics”... “optimization of the project scheme requires orientation of cracks of the rock masses, near construction sites”... “at the stage of design, it is recommended to carry out drilling works for obtaining detailed information about the gaps”... “it is recommended, at the designing stage, to conduct more detailed research for examining the possible karstic conditions”... “it is recommended to carry out drilling works with on spot testing, taking samples and conducting laboratory tests. In addition, it is recommended to install piezometers for controlling water level”.

Therefore, the EIA report recognizes insufficiency of the existing geological research, while implementation of the project in seismically risky and geologically unexamined territory will definitely endanger human life and property rights. Specifically:

- Lack of hydrological research will cause significant problems due to the problematic nature of river Rioni during downfalls. The report indicates that “in the period of downfalls, considering large masses of sediments, there is high risk of cluttering Oni 2 HEPP upper part of Rioni and thus – increasing the level of river Jejora. Therefore, without mitigation measures, there is a risk of flooding the city of Oni.” Existing incomplete data and low quality of EIA, its inconsistency with international practices and inconformity with Georgian legislation, do not allow to create adequate mitigation measures.
- During the construction period, movement of heavy equipment and its vibration, along with other contaminants significantly harm village Lagvanta, because the road, used for the movement of heavy equipment, goes through the densely settled area of this village. In addition to disturbance and contamination, there is a risk of damaging the buildings. Proposed mitigation measures are inadequate.
- HEPP project will cause significant visual contamination. This will be caused by capturing a significant flow of the water inside the pressure pipe, resulting in disappearance of 25 kilometers of river, with installed transfer networks and infrastructure. Measures for mitigating visual-landscape related impact (“adjustment of the color and design of permanent construction sites to the landscape”) is completely inadequate.
- It is indicated that “the implementation of the HEPP cascade project will definitely cause activation of such businesses in the region, as: production of construction materials, transport services, production and selling of food products, activation of service sector, etc., which will create additional sources of income and employment opportunities.” It is not indicated, however, what will be the impact of such activation.
- The response mechanisms to the industrial breakdowns are completely inadequate and insufficient to tackle anticipated hazards. Almost exactly similar activities were indicated in the EIA report of Dariali HEPP (practically copied). Dariali HEPP was implemented by the same company “Peri”, while EIA was prepared by the same company “Gama”. Dariali HEPP turned out to be completely unprepared in face of the industrial breakdown, sacrificing lives of a group of people

(including company staff).

According to the Environmental Assessment Code, the works are rejected if their implementation contradicts the legislation (Article 14). According to the same article, the Minister issues individual administrative-legal act on the rejection of the works, if the EIA report and expertise conclusion indicate unacceptable levels or unacceptable quality of the environmental impact, or if it is impossible to implement preventive and mitigation measures against such impact.

As mentioned, EIA does not include comprehensive research of biodiversity, hydrology or geology. In such conditions, it is impossible to define the quality and intensity of the impact on the environment, as well to define the possibilities for prevention and mitigation of environmental impact risks.

CONCLUSION

In conclusion, it must be emphasized that the review of the documentation of both Namakhvani and Oni HEPPs has demonstrated the existence of a number of procedural violations and content-related problems. The procedure of issuance of environmental permits by the authorities is contradicting the legislation of Georgia (especially, in terms of public engagement). Moreover, the process, content and the decision-making process related to EIA demonstrates the failure of the GoG to comply with the EU and EUGAA obligations. It is expected that the MEPAG will attempt to adopt the decision on those HEPPs, based on the incompliant EIA reports, which may cause environment degradation, violation of socio-economic rights of local communities and industrial breakdowns. It is essential that the GoG changes the existing practice – the GoG must fully comply with the domestic legislation and international obligations, related to the HEPP project development. Unless those conditions are met, it will be impossible to implement successful energy projects, while the confrontation between on the one hand GoG/HEPP developers (who somehow always work as one side) and on another hand – the local communities/civil society.