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# Analysis of legal changes in relation to preventing further construction of SHPP in BiH

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# List of abbreviations and terms

**aCSA** – abbreviation for the Aarhus Center in Sarajevo, under the full name: Association “Resource Aarhus Center in Bosnia and Herzegovina”

**APOEF** – Action plan for the use of renewable energy sources in the Federation of Bosnia and Herzegovina

**BiH** – Bosnia and Herzegovina

**CZZS** – Center for the environment

**DERK** – State Regulatory Commission for Electricity

**EUD** – Delegation of the European Union

**EU** – European Union

**EC** – Efficient cogeneration

**FBiH** – Federation of Bosnia and Herzegovina

**FERK** – Regulatory Commission for Electricity in the Federation of Bosnia and Herzegovina

**FMERI** – Federal Ministry of Energy, Mining and Industry

**FMOIT** – Federal Ministry of Environment and Tourism

**FMPVŠ** – Federal Ministry of Agriculture, Water Management and Forestry

**Fossil fuels or mineral fuels** are fuels that are created from natural resources such as the anaerobic decomposition of buried dead organisms, millions of years old and sometimes more, and which contain high percentages of carbon and hydrocarbons. Fossil fuels include: peat coal (lignite, brown coal, hard coal), oil and natural gas

**HE** – Hydroelectric power plant – production of electricity using the energy of water flows

**Hydropower** is a form of electricity production, which consists of harnessing the energy created as a result of moving large amounts of water by converting the potential or kinetic energy of water into electrical energy.

**GWh** – gigawatt hour =  $1 \times 10^9$  Wh

**JP EPBiH** – Public company Elektroprivreda BiH (Power Company)

**kW** – kilowatt = 1,000 watts

**MVTEO** – Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina

**MW** – Megawatt = million watt = 1,000,000 watts

**NGO** – non-governmental organization

**RSE** – renewable sources of energy

**RS** – Republika Srpska

**SHPP** – Small hydropower plants

**W** – watt – one watt is one joule of energy per second. Also,  $1 \text{ watt} = 1 \text{ volt} \times 1 \text{ amp}$

**Wh** – watt hour – a unit of measurement whose application is permitted and common for expressing the value of electrical energy in the power system. One watt hour is the energy consumed by a 1 W consumer for 1 hour. Thus,  $1 \text{ Wh} = 1 \text{ W} \times 1 \text{ h} = 1 \text{ W} \times 3600 \text{ s} = 3600 \text{ J}$ . The usual unit is the kilowatt hour (kWh)



# Abstract

Bosnia and Herzegovina is especially known for its abundance of water and beautiful rivers. In fact, a large part of tourism is related to outdoor activities, in the vicinity of rivers and lakes. However, in the last ten years, the rivers of BiH have been under strong effect of bad management, which includes the expansion of the construction of hydropower facilities, especially small hydropower plants (SHPP).

BiH has a total of 244 rivers, which means that with the construction of more than 500 planned small hydropower plants, effectively all rivers in the country would be used for commercial purposes (Bučinski, 2017). As in neighboring countries, hydropower is currently being promoted and treated as clean energy in BiH. However, the consequences of the operation of hydroelectric power plants show the opposite. It is enough to look at the photos of dry riverbeds to become clear that there are no conditions for the life of plants and animals that depend on water, because water is the life. This wrong setup has produced an unfair and harmful consequence - encouraging or subsidizing the energy produced in hydroelectric power plants. Citizens and legal entities, as electricity consumers, are forced to pay the so-called incentives for renewable energy sources, and the funds collected in this way are used for personal, economic incentives for producers, i.e. investors. For the last ten years, most of the money collected through the incentive system has been redirected to investors who built SHPPs. The way in which hydropower plants are built, especially SHPPs in Bosnia and Herzegovina, is in most cases closely related to corrupt practices and internal agreements between investors and authorities responsible for issuing concessions, water, environmental, urban, construction and other permits.

As a reaction to these events, different groups of people protested across BiH in order to protect their right to water. Those groups, some non-governmental organizations, some informal groups and individuals joined and started working together within the Coalition for the Protection of Rivers of Bosnia and Herzegovina. The goal of this joint action is to stop all illegal processes related to the construction of small hydropower plants, case by case. A parallel goal is advocating for legal changes to prohibit the further construction of such facilities. In the last three years, due to the strong action of the Coalition for the Protection of Rivers of Bosnia and Herzegovina, historic legal changes have taken place in the areas of environmental protection, water, energy and nature protection. ■■■





# Chapter 1.

## INTRODUCTION

This chapter presents the problems, the purpose of the analysis, the research questions and the importance of the analysis, with a special focus on understanding the importance of legal changes in relation to SHPP. Certainly, environmental policies and laws have an extremely important, if not vital socio-political and economic effect on the country. They set rules and guidelines on the way the country's natural resources are to be, or are intended to be used. According to the internationally accepted standards, natural resources should be used reasonably, with special attention to sustainable aspects of economic activity, among other things, minimizing negative side effects in order to achieve sustainability, that is, the possibility of using those resources in the future.

### 1.1 Statement of the research problem

It is not uncommon to hear that environmental protection policies and laws in Bosnia and Herzegovina lag behind when faced with economic development and investments, which promise significant financial gains. A particular economic pressure is observed in a situation when developing countries, such as Bosnia and Herzegovina, face long-term political and economic instability, recession, high unemployment rate and the transition process. The aforementioned gap of economic uncertainty is being bridged by the use of natural resources, with the aim, among other things, of achieving the energy transition from fossil to the so-called renewable energy sources, which currently includes hydropower.

### 1.2 Purpose of analysis

The purpose of this research work is to analyze the legal changes regarding the ban on further construction of small hydroelectric power plants in Bosnia and Herzegovina from the perspective of work and advocacy of non-governmental organizations in the field of environmental protection in BiH, gathered within the informally organized Coalition for the Protection of Rivers of BiH.

### 1.3 Research questions

Two central questions are:

1. "How were environmental policies and laws created and developed in Bosnia and Herzegovina in relation to preventing further construction of SHPP?"
2. "In what way did the environmental non-governmental organizations (NGOs), gathered within the informally organized Coalition for the Protection of the Rivers of Bosnia and Herzegovina, influence changes in environmental policies and laws in Bosnia and Herzegovina in relation to preventing further construction of SHPPs?"

## 1.4 Importance of analysis

This analysis promotes a better understanding of various obstacles that citizens and NGOs have encountered during their efforts to preserve rivers in BiH from the construction of SHPP. The analysis will be useful to all individuals who want to learn more about the abovementioned problems and about legal solutions related to the prevention of further construction of SHPP in BiH, as well as the key reasons for which the further ban on the construction of SHPP was promoted by the NGOs gathered within the informally organized Coalition for Protection of Rivers of BiH. Therefore, citizens, authorities in BiH, research centers, universities, non-governmental organizations and others could benefit from the findings of this analysis.

## 1.5 Research design and methods

This chapter presents the research design and methods. As the subject of this analysis is quite unique, different research methods were used to make the data more reliable and gathered in a more efficient manner.

### Research design

We used qualitative and research methods to answer the two central questions of the analysis (“How were environmental policies and laws created and developed in Bosnia and Herzegovina in relation to the prevention of further construction of SHPP?” and “In what way did the environmental non-governmental organizations (NGOs), gathered within the informally organized Coalition for the Protection of Rivers of Bosnia and Herzegovina, influence changes in environmental policies and laws in Bosnia and Herzegovina in relation to the prevention of further construction of SHPPs?”). Publicly available information, laws, regulations and strategies of competent institutions were used, as well as professional and practical experience gained in this field. The main purpose of the research is to generate a better insight into the creation of environmental protection policies and laws in BiH in relation to the prevention of further construction of SHPP and to understand how non-governmental organizations within the informally organized Coalition for the Protection of Rivers of BiH influence the creation of those laws and policies.

### Data collection

Data collection was based on available documents from the research subject, which included, among other things, national and entity environmental protection strategies, environmental laws and regulations at all levels of management, personal experiences and work within the NGO Association “Resource Aarhus Center in BiH.” The Coalition for the Protection of Rivers of Bosnia and Herzegovina was used as a platform for online distribution of questionnaire and online data collection. The questionnaire was perfected based on the suggestions and advice of individual members of the Coalition for the Protection of Rivers of Bosnia and Herzegovina. A total of twelve (12) questions, some of which contain multiple answers and attached lists of options, were sent to all members of the Coalition via social media and official e-mail. (Appendix A). Fifteen (15) members, individually and/or as representatives of NGOs, (out of over 20 environmental NGOs, members of the BiH River Protection Coalition, at the time the questionnaire was distributed) provided answers to the questions.

## Data analysis

Information collected from environmental protection studies, laws, regulations, published news, practical experience and work within the NGO Association “Resource Aarhus Center in BiH” and questionnaire were compared and contrasted. In order to gain a more objective and comprehensive insight into the process of changes to the legal framework in relation to the SHPP, personal experiences were compared and contrasted with the comments from the prepared questionnaire (Appendix A), which was the primary purpose of the questionnaire.

## Limitations of the analysis

The limitations of the analysis are closely related to the chosen research method, that is, the shortcomings of qualitative research methods can affect the interpretation of data and conclusions, so that some conclusions may be generalized. Moreover, since qualitative research relies more on words, it means that the collected data can be interpreted subjectively. However, in order to avoid or minimize the effects of subjective generalization, several sources were used in this research to confirm the collected data, where the adopted laws and regulations represent the most reliable source of information. A questionnaire was prepared and used to obtain the data related to some more specific questions, which also served as an additional sampling tool, consisting of a combination of open and closed questions. The data from this questionnaire were then contrasted with the data obtained from other sources, especially in relation to the subjective opinions and experiences. In this way, it was possible to test the development of laws and policies in relation to the SHPP over time, and at the same time to compare the collected data. When it comes to the questionnaire, another limitation is related to the sample size, given that the questionnaire was distributed only to the members of the “Coalition for River Protection in BiH” network. Furthermore, there is a lack of previous research studies and analyses on this topic, as well as a lack of available data, especially when it comes to the opinion of the general public in relation to the entire process of amending the legal framework related to the prevention of further construction of the SHPP in BiH. ■■■

# Chapter 2.

## RENEWABLE ENERGY SOURCES

According to the current Law on the Use of Renewable Energy Sources and Efficient Cogeneration (“Official Gazette of the Federation of BiH”, number: 70/13), abbreviated: Law on the Use of RES and EC, “the renewable energy sources” means renewable non-fossil energy sources (wind, sun, geothermal sources, waves, tides, hydropower, biomass, landfill gas, gas from waste processing plants and biogas). The above definition closely follows the definition found in the Article 2, paragraph (2) section a) of the Renewable Energy Directive 2009/28/EC (European Parliament and Council of the European Union, 2009, pp. 17-18). Namely, according to the Agreement on the Establishment of the Energy Community (“Official Gazette of Bosnia and Herzegovina - International Agreements”, number 9/06), which was concluded by the European Union, on one hand, and Albania, Bosnia and Herzegovina, Montenegro, Kosovo, Macedonia, Moldova, Serbia, Ukraine and Georgia, on the other, “the contract signatories are obliged to increase the use of renewable energy, and established conditions for energy trade within a single regulatory space” (Council of Ministers of BiH, 2018, p. 38). In order to fulfill these obligations, all contracting parties are obliged to gradually adopt parts of the EU acquis, i.e. “EU acquis Communautaire” in such a way as to transpose into their legislation the requirements and rules of the corresponding directives and regulations of the European Union in the areas of electricity, gas, environmental protection, competition, renewable energy sources, energy efficiency, oil, keeping statistics and infrastructure, in order to protect consumers, reduce energy dependence and mitigate environmental impacts. Unfortunately, the transposition and implementation of the EU acquis in BiH and its entities is not taking place according to the agreed dynamics, especially considering that the competence for environmental matters has been lowered to the level of entities that have full authority in this field, while the Ministry of Foreign Trade and Economic Relations of BiH has the supervisory role and makes sporadic coordination on the state level. The situation is similar in relation to energy strategies and coordination in this area.

### 2.1 Technologies of renewable energy sources

Bosnia and Herzegovina has a large technical potential of renewable energy sources, such as solar potential, which is 2,963.7 MW, followed by wind potential of 13,141.1 MW and hydro potential of 6,110 MW (BiH Council of Ministers, 2018, p. 104). This means that in addition to hydropower plants, whose cost-competitive potential is 2,510 MW, BiH also has a large cost-competitive solar and wind potential. However, the largest contribution in 2015 in Bosnia and Herzegovina was made by hydropower plants, that is, an almost complete contribution in the electricity sector in the amount of **99.9%**, while the rest of the contribution was made by solar power plants (Council of Ministers of Bosnia and Herzegovina, 2018, p. 106). In the last seven years, more precisely from 2015 to 2022, the share of RES from hydropower plants did not change significantly and

was still over 95%, with a moderate increase coming from wind power plants and more recently from solar power plants. It is important to point out that in Bosnia and Herzegovina **only hydropower plants with a power of up to 10 MW are subsidized**, as well as all the other previously mentioned sources (wind power plants, solar power plants and biomass/biogas power plants) (Council of Ministers of Bosnia and Herzegovina, 2018, p. 107). This means that hydropower plants larger than 10 MW **are not subsidized**. However, **there is no** such restriction in the Renewable Energy Directive 2009/28/EC. By the way, Article 3 of the aforementioned Directive stipulates that by **2020** in the European Union, the share of renewable energy sources in the final gross energy consumption in the community must be **“20%”** (European Parliament and Council of the European Union, 2009, p. 19). It is interesting that BiH adopted the Action Plan for the use of RES, and thus committed to achieve a share of **40%** in the total final consumption by 2020 (Council of Ministers of BiH, 2018, p. 65). In 2014, the Federation of Bosnia and Herzegovina adopted a similar Action Plan for the use of RES in which it committed to achieve a share of **41% in the total final consumption by 2020**, and the Republika Srpska **even 48%** (Council of Ministers of Bosnia and Herzegovina, 2018, p. 104). This means that Bosnia and Herzegovina assumed **a twice as strict standard** in relation to the percentage of electricity production from RES, which it **managed to achieve by the given deadline!** Namely, according to the data of the State Regulatory Commission for Electricity (DERK), BiH produced 40% of the total electricity produced from RES in 2019 (DERK, 2019, p. 34). This means that if it were a member of the EU, BiH would already be in a high eighth place in terms of the production of electrical energy from RES, compared to the 28 EU member states (European Commission, 2020). However, such a remarkable result should be viewed from the aspect that BiH was already achieving significant production of electricity from renewable energy sources even before these set goals, mostly on the basis of the already established network of hydro potential use.

## 2.2 Small hydropower plants

So far, **121 small hydropower plants** have been built in BiH, of which 69 are in the Federation of BiH and 52 in the Republika Srpska, while the construction of at least additional 352 SHPP is planned (Eco action, 2022). The 108 small hydroelectric power plants that were in operation in 2020 produced 341.02 GWh, that is, only **2.2%** of the total electricity produced in BiH (DERK, 2020, p. 36)! Due to a slightly more favorable hydrological situation and higher rainfall in 2021, the SHPP produced about 2.5% of electricity in BiH, i.e. **only** 433.41 GWh of the total produced 17,055.44 GWh of electricity (DERK, 2021, p. 38). Otherwise, due to the high level of automation, it is not necessary to hire workers for the operation of the SHPP, and depending on the location, usually **up to one worker** is employed per power plant (Eco action, 2021). Concession fees are very low and usually make up **to 3%** of the total revenue of each small hydropower plant (Eco

action, 2021). In the Central Bosnia Canton, where almost a third of the total number of SHPPs in BiH has been built so far, this canton generates only **0.46%** of its total income from the concession fees (Eco action, 2021).

It is important to point out that there are different estimates of the potential of the SHPP and these estimates do not have significant mutual deviations, “where in the previous studies of JP EPBiH (done until 1992) they talk about a theoretical hydro-potential in BiH of approx. 99,256 GWh/y, technical potential of approx. 23,395 GWh/y, of which only **2,599 GWh/y are small hydropower plants** with a total installed power of approx. 700 MW that could be used by building **over 800 small HPPs** of various individual capacities up to **a maximum of 5 MW**” (FBiH Government, Federal Ministry of Energy, Mining and industry, 2009, p. 188).

Article 15 of the Regulation on encouraging the production of electricity from renewable energy sources and efficient cogeneration and determining incentives for F BiH (“Official Gazette of the Federation of BiH”, number: 48/14) classified facilities for the purpose of determining the facilities that may be eligible for incentives, where, depending on the installed power, the plants are divided into:

- a) micro plants: from 2 kW up to and including 23 kW,
- b) mini plants: from 23 kW up to and including 150 kW,
- c) **small plants: from 150 kW up to and including 1 MW,**
- d) medium plants: from 1 MW up to and including 10 MW,
- e) large plants: over 10 MW.”

According to the above qualification, **small plants are facilities up to 1 MW**. However, as far as the construction of small hydropower plants in the F BiH is concerned, in the process of obtaining the necessary permits, such as an environmental permit, the power plants with an installed power of 5 MW and above were often categorized as “small” plants, such as the so-called small hydropower plants (SHPP) “Buna I” and SHPP “Buna II”, which are planned to be built at the mouth of the Buna River and on the Neretva River, of which each has an installed capacity of 5 MW. Using adjectives such as “small” and “mini,” this categorization has caused an apparent mitigation of the environmental damage, in order to mislead the citizens in whose municipalities the hydroelectric power plant is intended to be built. By using these marketing adjectives, investors tried to win over citizens and thus avoid their resistance at an early stage of obtaining permits. In the Republika Srpska, according to Art. paragraph 45 (1) of the Ordinance on encouraging the production of electricity from renewable sources and in efficient cogeneration (“Official Gazette of the Republika Srpska”, numbers: 114/13, 88/14, 43/16, 29/19); the Regulatory Commission establishes in a special decision the guaranteed purchase price of electricity produced in the following types of production facilities:

- a) hydropower plants with installed capacity:
  - up to and including 1 MW,
  - over 1 MW up to and including 5 MW, and
  - over 5 MW up to and including 10 MW.”

By looking at the aforementioned Ordinance, it can be concluded that there is no precise classification of hydropower plants into the so-called small, medium or large. However, as in the F BiH, investors in the RS often used adjectives like “small” and “mini” in order to please the citizens during the promotion process, and again during the actual construction of an individual hydropower facility.

## 2.3 Subsidizing the hydropower tsunami in Bosnia and Herzegovina

Due to the frequency of public criticism and protests by the citizens throughout Bosnia and Herzegovina, it was revealed in many cases that the incentives or subsidies for the construction of small hydropower plants compared to other forms of RES, such as wind and solar energy, were the result of calculated political decisions, motivated by the requests of investors, who were often in close relations with the ruling government representatives. Namely, investors signed a contract with local electricity companies on the mandatory purchase of electricity for **12 (in the Federation)** or **15 years (in the Republika Srpska)**, which guaranteed a preferential price for electricity that is permanent independent of the market. Everything that the investors produce in those 12 or 15 years would be bought at that price, which represents a very stable source of income for the investor and the **primary economic motive** for the construction of the SHPP, while the concessional right to use the river can last up to 30 years, and increasingly, concessions annexes to the concession contracts are extended to **50 years**. Moreover, practice has shown that during the awarding of concession contracts, local communities where the SHPP was planned to be built would be promised that after the expiration of the concession contract, the SHPP would be transferred to the ownership of the local community or that the river would return to its previous state. The payback period would often be advertised to last up to 15 years. However, in reality, according to the data from the various signed concession contracts, it is evident that the concession right to use a particular river for the operation of the SHPP is usually contracted to last a minimum of 30 years, and then it would be extended for another 20 years through an annex to the concession contracts. The abovementioned issue has been present for the last 10 years, with all competent authorities contributing to it in their own way, through active corruption activities of individuals or through indirect support in the form of administrative silence to requests made by concerned citizens. Based on the Law on Concessions in the FBiH, the cantons are competent to issue concessions for the construction of hydro power plants up to 5 MW. For this reason, concessions for HPP **up to 5 MW** are obtained from the competent cantonal authorities, and **above 5 MW from the Federation authorities**. Many cases have shown that concessions are obtained in an extremely “(non)transparent manner, and (with) the issuance of «questionable» environmental permits and «questionable» compliance with ecological criteria during the construction” (FBiH Government, Federal Ministry of Energy, Mining and industry, 2009, p. 202). In addition to this, the laws on concessions at all levels of government leave the possibility for the submission of a **self-initiated offer** by the investor, which is almost the exclusive practice in the case of the construction of the SHPP in Bosnia and Herzegovina. Therefore, an important reason for the massive investments in the construction of the SHPP should be sought **in the established system of concession fees and incentives for renewable energy sources (RES)**, which all citizens of Bosnia and Herzegovina pay for through their electricity bills.

In the report entitled “*Tsunami of hydroelectric power plants in the Balkans*”, a drastic increase in the number of planned hydroelectric power plants in the Balkans was presented, which is growing every year (River Watch, 2017). “[A]round **2,800 hydro-power plants** are planned in the area from Slovenia to Greece, of which as much as **37 percent** will be built within protected areas, such as national parks and Natura 2000 areas” (River Watch, 2017). As part of the “*Save the Blue Heart of Europe*” campaign, River Watch, a river protection society, regularly monitors the development of hydroelectric power plants in the Balkans. In coordination with local non-governmental associations and groups, such as those gathered in the Coalition for the Protection of Rivers of BiH, efforts have been made for many years to stop the illegal construction of the SHPPs, especially SHPPs that are planned on the so-called wild and pristine rivers that represent the last hideouts for numerous plant and animal species on the European continent, many of which are critically endangered and on the verge of extinction. ■■■

## Chapter 3.

# LEGAL CHANGES - PREVENTION OF FURTHER CONSTRUCTION OF THE SHPP IN BIH

The struggle to stop or impose a “moratorium” on the construction of the SHPP in BiH dates back to the construction of the first similar facilities on the territory of BiH, in the 90s and 2000s. Still, with relation to the intensification of the advocacy aspect, the establishment of the informal Coalition for the Protection of Rivers of Bosnia and Herzegovina in June 2016, and the period after that, led to the drafting and then the adoption of the “Declaration on the Protection of Rivers of the Western Balkans” in November 2019. The aforementioned Declaration is the product of the work of non-governmental organizations, most of which are gathered within the Coalition for the Protection of Rivers of Bosnia and Herzegovina. The agreed adoption of the text of the Declaration was carried out at the international conference “Legal and practical tools for the protection of the rivers of the Western Balkans”, and in addition to the participants from Bosnia and Herzegovina, the conference was attended by individuals and NGOs from Croatia, Czech Republic, Albania, Montenegro, Serbia and North Macedonia, as well as representatives of relevant institutions of BiH (CZZS, 2019). After a graphical presentation of numerous cases of river devastation by the SHPP, the conference participants agreed “...to contact the competent institutions with a **request for a moratorium on the construction of hydroelectric power plants** and to revise all adopted strategies/plans/programs and other strategic documents that directly and indirectly affect the management of our rivers” (CZZS, 2019). After the conference, many members of the Coalition for the Protection of Rivers of Bosnia and Herzegovina took this mandate seriously and began advocating in order to gain support of the competent institutions. Namely, it was established that the “case by case” fight is not effective and quick enough to protect all rivers on which the construction of the SHPP was planned, especially considering the planned number of the SHPP, which amounts to more than 500. For this reason, it was concluded that it was necessary to integrate the fight for the protection of rivers in such a way as to first take a single position regarding the SHPP, based on the data that has been collected for several years and that clearly proved that the economic and energy efficiency of these facilities was quite negligible compared to the scale of damage to the environment and the local population that depends on the rivers. These data were presented to a wider audience during the conference “Legal and practical tools for the protection of the rivers of the Western Balkans.”

With reference to this, the role of the Coalition for the Protection of Rivers in Bosnia and Herzegovina (in the following text also abbreviated as “the Coalition”) is “to provide support to the local population to get involved in decision-making in a timely manner and adopt a position on the construction of hydroelectric power plants in Bosnia and Herzegovina.... it currently gathers over 20 organizations from all over the country and the number of members is still growing. In the Coalition, **individuals and organizations are very important**, and their work shows how rivers can be used sustainably, with minimal impact on nature and with benefits for the local population” (Coalition,



2022). Therefore, the Coalition has become a unique platform, created with the aim of providing support to all citizens who have tried or are trying to protect rivers in their communities from the construction of hydropower facilities, with special reference to the SHPP. Through the combined action of both individuals and NGOs within the Coalition, with the help of activists, a group of experts from different fields has been established: biology, ecology, field research, geography, energy, economics, informatics, law, journalism, chemistry, etc. They offered their expertise, primarily on a volunteer basis, to citizens who turned to the Coalition for help. The combined expertise of the Coalition was crucial in identifying the SHPPs as energetically and economically unprofitable facilities. Also, the Coalition was an indisputable factor in raising awareness on the harmfulness of these facilities through the media and individual trainings, and then in relation to the establishment of an advocacy front for legal changes. However, it is important to point out that it was the **general public** that addressed the members of the Coalition in individual cases that was the **driving force** of the fight for the protection of rivers from the SHPP and for the establishment of public opinion that provided strong and indispensable support for the introduction of legal changes aimed at preventing further construction of the SHPP in Bosnia and Herzegovina.

### 3.1 Moratorium on the SHPP in the Federation of Bosnia and Herzegovina

The advocacy efforts of the Coalition for the Protection of Rivers of Bosnia and Herzegovina resulted in first victories in 2020 when, on June 23, 2020, representatives of the House of Representatives of the Parliament of the Federation of Bosnia and Herzegovina adopted the Declaration on the Protection of Rivers and voted for the **Conclusion on the complete ban on the construction of hydropower plants in the territory of the FBiH** (No. 01-13 -479,481, 01-14-164, 166, 167/20, dated 6/29/2020). In this way, this legislative institution has clearly expressed its position for the first time that the SHPPs in FBiH have no future. However, as the name suggests, the said Declaration has a declarative application, expressing the political will related to the necessity of changing a certain position, in this particular case, the position against supporting the further construction of the SHPP. Therefore, the members of the Coalition found that it is necessary to advocate for specific legal changes, based on the principles established in the text of the Declaration. In November 2020, the Coalition presented a list of requests for legal changes at a meeting held with the Prime Minister of the FBiH Government and relevant representatives of the competent Federation ministries: Environment and Tourism; Energy, Mining and Industry; Agriculture, Water Management and Forestry (Government of the FBiH, 2020). With the help of the members of the Coalition, the aforementioned meeting caught international attention, so the actor and activist for environmental protection, Mr. Leonardo DiCaprio, on his Instagram profile, urged the

Prime Minister of FBiH and the Government of FBiH “to take legal measures to protect rivers, that is, areas of special natural importance - the Blue Heart, from further destruction by the construction of small hydroelectric plants (Radio Free Europe, 2020).

### 3.1.1 List and table of requests sent to the Federation institutions

In November 2020, representatives of various members of the Coalition sent the following agreed list of demands to the Federation institutions in relation to the legal changes to prevent further construction of the SHPP in the Federation of Bosnia and Herzegovina (Eco Action, 2020):

#### A. Immediate steps:

1. Reduction of the contracted, i.e. complete cancellation of future incentives for electricity produced in small hydroelectric power plants over 150 kW, which would stop rewarding the destruction of the environment.
2. Cessation of the issuance of environmental permits for the construction of the SHPPs, which would almost completely stop the construction of new SHPPs.
3. Immediate abolition of the part of the “fee for renewable sources” which is channeled to small hydropower plants, and which is paid by all citizens and legal entities in the Federation of Bosnia and Herzegovina along with monthly electricity bills, even during the state of emergency caused by the pandemic.

#### B. Medium-term measures – aimed at repairing the damage caused by the construction of the SHPPs and preventing their construction in the future:

1. Revision of permits and consents issued so far for the construction through:
  - determining the irregularities in the process of issuing documents;
  - determining the responsibility of competent institutions and individuals;
  - defining the obligations of investors in order to eliminate irregularities;
  - stipulating the investor's obligations regarding the remediation of environmental damage caused during the construction process and prevention of any future environmental destruction.
2. Protection of the living world from the operation of existing SHPPs through the amendment of by-laws.
3. Reform of inspection bodies.

#### C. Long-term work – aimed at the preservation of water wealth, implies comprehensive water protection, namely:

1. Law on River Protection (if possible, as a separate law, i.e. *lex specialis*, in order to resolve possible conflicts of norms in the existing legal framework).
2. Constitutional protection of water and the right to drinking water.

Along with this List of Requests, a detailed table with an overview of specific measures was sent (Eco Action, 2020):

## OVERVIEW OF MEASURES NECESSARY FOR THE PROTECTION OF WATER RESOURCES IN THE FEDERATION OF BIH

Competent institution	Name of the legal document	Type of changes and amendments	Aim
1. Federal Ministry of Environment and Tourism	<b>Rulebook on plants and facilities for which an environmental impact assessment is mandatory and plants and facilities that can be built and put into operation only if they have an environmental permit</b> (“Official Gazette of the FBiH”, No. 19/04)	Amendment of the Rulebook	That almost all environmental permits (for plants over 150 kW) for the SHPP construction projects are issued by the FMOIT with a mandatory environmental impact assessment procedure.
2. Federal Ministry of Environment and Tourism	<b>Rulebook on determining conditions, criteria for approval and maintenance of certification for members of expert commissions for the evaluation of activity plans and studies on environmental impact assessment in the process of issuing an environmental permit</b> (“Official Gazette of the FBiH” 94/12)	Amendment of the Rulebook	Changes are needed to enable the establishment of special commissions for the assessment of impact studies of the SHPP construction projects for which the environmental permit is issued by the FMOIT.
3. Federal Ministry of Environment and Tourism	<b>Rulebook on the method of establishment and work of expert commissions for the evaluation of environmental impact assessment studies in the process of issuing an environmental permit for plants for the production of hydroelectric power</b>	Creating a new rulebook	It is necessary to pass a new rulebook that would specify the way of establishment and work of commissions for evaluating the impact studies of the SHPP for which the environmental permit is issued by the FMOIT.
4. Federal Ministry of Energy, Mining and Industry Government of the Federation of Bosnia and Herzegovina	<b>Ordinance on encouraging the production of electricity from renewable energy sources and efficient cogeneration and determination of incentive</b> (“Official Gazette of the FBiH”, 48/14)	Amending the Ordinance	Cancellation of incentives for SHPPs over 150 kW.
5. Federal Ministry of Energy, Mining and Industry Government of the Federation of Bosnia and Herzegovina	<b>Decision on amending the Decision on adoption of an action plan for the use of renewable energy sources in the Federation of Bosnia and Herzegovina</b>	Amending the APOEF	Changing the quotas for hydropower to encourage only production from SHPPs up to 150 kW and canceling the right to purchase at the reference price for SHPPs over 150 kW.

<b>OVERVIEW OF MEASURES NECESSARY FOR THE PROTECTION OF WATER RESOURCES IN THE FEDERATION OF BIH</b>			
Competent institution	Name of the legal document	Type of changes and amendments	Aim
6. Federal Ministry of Agriculture, Water Management and Forestry	<b>Amendment of the Rulebook on the method of determining environmentally acceptable flow</b>	Amendment of the Rulebook	Establishing the obligation for investors to monitor the ecologically acceptable flow in real time and regularly submit telemetric data to the information systems of the Water Agencies.  Revision of the algorithm for calculating the environmentally acceptable flow in accordance with the best practices of EU member states.
7. Regulatory Commission for Energy in the Federation of Bosnia and Herzegovina	<b>Amendment of the Rulebook on the methodology for determining the reference price of electricity</b> (“Official Gazette of the FBiH”, 50/14)	Amendment of the Rulebook	Abolition of the incentive coefficient of electricity from renewable sources in order to lower the reference price of electricity.
8. Federal Ministry of Environment and Tourism	<b>Adoption of the Law on river protection</b>	New law	Special protection of rivers that would be implemented by establishing a national system of wild and scenic rivers, determining the initial components of that system and prescribing methods and standards according to which additional components can be added to the system from time to time.
9. Parliament of the FBiH	<b>Amendments to the Constitution of the Federation of BiH on water protection and the right to drinking water</b>	Amendments to the FBiH Constitution	Constitutional protection of water and the right to drinking water.
10. Cantonal Assemblies	<b>Amendments to the constitutions of cantons in the Federation of BiH on water protection and the right to drinking water</b>	Amendments to cantonal constitutions	Constitutional protection of water and the right to drinking water.

### 3.1.2 Analysis of the recognized requests sent to the Federation institutions

#### A. Immediate steps:

##### Steps 1 and 3

As for steps 1 and 3, there have been significant changes in relation to the FBiH Electricity Law (“Official Gazette FBiH”, no. 66/2013, 94/2015, 54/2019, 1/2022 and **61/2022**). Amendments to this Law more clearly defined that small hydropower plants are all hydropower facilities **up to and including 10 MW**. Furthermore, the amendments set the **suspension of the issuance of energy permits** for all SHPPs. Without energy permits, these facilities cannot be legally built, and **this is precisely how their de facto suspension** in relation to the construction occurs, given that the possession of an energy permit is necessary for the investor in the process of collecting the necessary permits for the construction of a production power facility.

However, the entire text of the FBiH Electricity Law is being changed at the moment and is in the form of a draft. What is important is that the draft retained the last changes in relation to the SHPP, i.e. the new definition that SHPPs are all hydropower facilities up to and including 10 MW has been retained and that the issuance of energy permits for SHPPs has been suspended. However, the members of the Coalition sent additional comments and proposals to the draft as part of the public discussions in order to improve the text of the draft as much as possible, especially in the context of the exemption of energy permits for the SHPPs. With the improved text of the draft, it would be possible to achieve a more significant harmonization with the Directive 2018/2001 of the European Parliament and the Council on the promotion of the use of energy from renewable sources, which amended the Renewable Energy Directive 2009/28/EC.

Also, the entire text of the Law on the Use of Renewable Energy Sources and Efficient Cogeneration of the FBiH is currently in the draft form. This draft **omits the SHPPs as renewable energy** sources, which is crucial for preventing their further construction, especially since the Art. 30. of this draft omits the possibility for electricity producers to achieve **incentives** for the production of electricity from the SHPPs, because the energy of water flows through small plants is **not treated as a form of RES!** So, with the adoption of the new Law on the use of RES and EC FBiH, the system of incentives, i.e. the system of subsidizing the production of electrical energy from SHPP will **effectively be under a complete suspension!** However, considering that the draft should be adjusted in relation to other articles and types of incentives from other RES, members of the Coalition submitted additional comments and proposals to this draft as part of public discussion. With a better text of the draft, it could be possible to even more effectively comply with the provisions of the EU Directive 2018/2001 on the promotion of the use of energy from renewable sources, in relation to the aspects of promoting energy efficiency, establishing an efficient centralized heating and cooling system, etc.

It is important to point out that the adoption of the new FBiH Law on Electricity as well as the new Law on the Use of RES and the FBiH EC will lead to the necessary changes to the accompanying Ordinance on encouraging the production of electricity from renewable energy sources and efficient cogeneration and determination of incentive fees (“Official Gazette of the FBiH”, 48/14). In this way, the request 4 from the table sent to the competent institutions by the members of the Coalition would be implemented.

There has been no progress with relation to the request 5 from the table sent to the competent institutions by the members of the Coalition concerning the Decision on amending the Decision on the adoption of the Action Plan for the Use of Renewable Energy Sources in the Federation of BiH (“Official Gazette of the Federation of Bosnia and Herzegovina”, no. 48/14, **70/14**). Namely, in the Decision on Adoption of the Action Plan for the Use of Renewable Energy Sources in the Federation of BiH (“Official Gazette of the Federation of BiH”, No. 48/14) in the text of the Action Plan of the Federation of

BiH for the Use of Renewable Energy Sources (APOEF), Table 10. : *Overview of electricity production from RES to be encouraged until 2020*: in the column for 2016, where the power is expressed in MW, in the row related to hydropower from medium plants from 1 to 10 MW, number: “19,534” is replaced by “**21,036**.” In other words, that Decision increased the planned production of electricity from hydropower facilities with a capacity of 1 to 10 MW, planning that by 2020 this increase would amount to as much as **35,000**. It is for this reason that the members of the Coalition had asked to change the APOEF in such a way that the quota for encouraging hydropower is the production of electricity from the SHPPs with a power of **up to 150 kW**, and at the same time to abolish the right to purchase at the reference price for the SHPPs with a power of over 150 kW.

In the Federation of Bosnia and Herzegovina, subsidizing electricity from renewable sources is based on the guaranteed tariffs. The calculation of guaranteed purchase prices is carried out by FERK on the basis of the Rulebook on methodology on the method of determining **guaranteed prices** of electricity from plants for the use of renewable energy sources and efficient cogeneration (“Official Gazette of FBiH” number 50/14). This calculation is performed **every 18 months**, while the final approval of these prices prepared by FERK is given by the Government of the Federation at the proposal of the FMERI. During the calculation, “investment costs, capital cost, operation and maintenance costs, fuel costs, and the investment return period are considered, based on which guaranteed purchase prices are obtained for all plants depending on the installed power and the primary energy source used” (RES&EC, 2022). According to Article 7 of the said Rulebook, the guaranteed purchase price of electricity ( $G_c$ ) is “the value obtained by multiplying the **reference price of electricity** ( $R_c$ ) by the associated tariff coefficient for a certain type of RES and EK; where:  $G_c$  - guaranteed purchase price of electricity (KM/kWh),  $R_c$  - reference price of electricity (KM/kWh) and  $C$  - tariff coefficient ( $C$ ).” The guaranteed price of electricity determined according to the methodology for a privileged producer who has a contract with the Operator for RES and EK **remains unchanged during the entire contract period!**

FERK is also responsible for the calculation of the **reference price of electricity**, which represents the purchase price for plants that use renewable energy sources and cogeneration and whose production is not encouraged. This price is calculated in accordance with the Rulebook on the methodology for determining the reference price of electricity (“Official Gazette of the Federation of BiH” numbers 50/14, 100/14 and **82/21**) and is calculated **every 18 months** (FERK, 2021, p. 88.). In this context, it is important to mention that there have been changes in the Rulebook on the methodology for determining the reference price of electricity (“Off. Gazette FBiH”, no. 50/14, 82/21). However, although changes have been introduced, they have not been made in accordance with the demands of the Coalition members, as requested in request 7 from the table they sent to the competent institutions. Namely, even in a request submitted separately at the beginning of 2021, the members of the Coalition asked FERK to cancel the incentive coefficient of electricity from renewable sources in the amendments to the Rulebook in order to lower the reference price of electricity. By canceling this benefit for investors, a significant decrease in the interest of potential investors in investing in the construction of the SHPP could be expected in the future. Nevertheless, this has not been done, but it has been determined that the reference price of electricity is determined “as a weighting of the realized price of electricity trade in the Federation of Bosnia and Herzegovina in the period of the previous 12 months of the holder of the FERK license for the supply of electricity - Tier II license, which for the period October 2020 - November 2021 amounted to 0.125953 KM/kWh” (FERK, 2021, p. 29). In this context, it is important to mention the Decision on determining the required amount of the incentive fee and the unit amount of the fee for the incentive of electricity production from RES and EC for 2022 (“Official Gazette of the FBiH”, number: 3/22). By this Decision, the total amount of funds, i.e. the required amount of compensation for subsidizing the production from RES and EC in 2022, is set at **25,273,102.00 KM**, while the unit amount of compensation for subsidizing the production of electricity from

renewable energy sources and efficient cogeneration for 2022 is **set at 0.0042 KM/kWh, excluding VAT**. The funds collected on the basis of the incentive fee are **the revenue of the RES and EC Operator**, which the RES and EC Operator disposes of and uses for: “payment of the incentive part from **the guaranteed price** for the produced electricity of **privileged producers**, covering/financing of the operating costs of the RES and EC Operator, payment/covering of balancing costs /balancing of the power system caused by deviations in the values of planned and produced electricity from the RES&EC plant” (RES&EC, 2022).

## Step 2

With relation to the proposed urgent steps, the step 2, aimed at the suspension of the issuance of environmental permits for the construction of the SHPP, a complete fulfillment of the request 1 from the table sent to the competent institutions by members of the Coalition was actually first achieved. Namely, in cooperation with the members of the Coalition, the FMOIT began to amend the Rulebook on plants and facilities for which an environmental impact assessment is mandatory and plants and facilities that can be built and put into operation only if they have an environmental permit (“Official Gazette of the FBiH”, No. 19/04), so that at the beginning of 2021, the Rulebook on Amendments to the Rulebook on plants and facilities for which an environmental impact assessment is mandatory and plants and facilities that can be built and put into operation only if they have an environmental permit, entered into force (“Official Gazette of the FBiH”, No. 19/04, **1/21**). These amendments stipulate that “plants for the production of hydroelectric power with an output of more than 150 kW” **must undergo** an environmental impact assessment procedure. Before the aforementioned changes, the environmental impact assessment procedure had to be carried out for individual plants of 5 MW and for more than 2 MW for several plants at a distance of less than 2 km. This assessment was necessary in the process of issuing environmental permits for these plants at the Federation level. Furthermore, the FMOIT previously had the discretion to decide whether before issuing an environmental permit it was necessary to carry out an impact assessment for hydropower plants with an electricity output of more than 1 MW, depending on the individual case, and the field practice showed that the cantonal environmental ministries often issued environmental permits for installations up to 5 MW **without any environmental impact assessment**, in accordance with Article 2 of the Rulebook, before the amendments. Therefore, with these amendments, the environmental impact assessment **became mandatory for hydroelectric** power plants with an output of **more than 150 kW**, and the FMOIT became **exclusively competent for this procedure**. Before the amendments to the Rulebook, plants **smaller than 5MW** were **in the jurisdiction of the cantonal environmental ministries**, which proved to be extremely ineffective and more prone to succumb to the corrupt activities of investors. For this reason, this change was insisted on, and because, due to their impact on the environment, plants larger than 150 kW were shown to be harmful to the environment and rivers, so it was necessary to increase the assessment threshold in such a way that this assessment is carried out for hydropower plants **starting from 150 kW**.

After the adoption of the amendments to the aforementioned Rulebook, an extra step was taken and the Ordinance on projects requiring an environmental impact assessment and projects requiring a decision on the need for an environmental impact assessment (“Official Gazette of the Federation of Bosnia and Herzegovina,” number 51/ 21 and 33/22) and the Ordinance determining plants and facilities that must have an environmental permit (“Official Gazette of BiH”, number 51/21) came into force. With the adoption of these ordinances, **the issuing of environmental permits for the HE and SHPP was suspended**, and the **focus was placed on the environmental impact assessment**, where Rulebook on plants and facilities requiring an environmental impact assessment and plants and facilities that can be built and put into operation only if they have an environmental permit (“Official Gazette of FBiH”, No. 19/04, 1/21), was put out of force.

The Ordinance on projects requiring an environmental impact assessment and projects requiring a decision is on the need for an environmental impact assessment, determined that an environmental impact assessment **is mandatory for all hydropower plants, regardless** of the output power of electricity. According to Article 7 of the aforementioned Ordinance, “[a]fter the preliminary environmental impact assessment procedure has been carried out and the factual situation has been established, a decision is made which determines:

- a) that there is no need to carry out an environmental impact assessment (making a study); or
- b) compulsory implementation of an environmental impact assessment, during which the obligation to prepare an environmental impact assessment study is determined, and the scope and content of the study are defined.”

Thus, the Ordinance clearly indicates the mandatory implementation of the environmental impact assessment for hydropower plants, where the FMOIT issues a special decision determining the scope of the study and the content of the study, in accordance with Article 7, paragraph (4). It is important to point out, and as stated in Article 2 of the Ordinance, that: “[this Ordinance takes over the provisions of Directive 2011/92/EU of the European Parliament and the Council of December 13, 2011 on the assessment of the effects of certain public and private projects on the environment (codification); which was amended by Directive 2014/52/EU of the European Parliament and of the Council of April 16, 2014 amending Directive 2011/92/EU on the assessment of the impact of certain public and private projects on the environment...” Also, as stated in Article 2 of the Ordinance determining plants and facilities requiring an environmental permit: “[this Ordinance takes over the provisions of Directive 2010/75/EU on industrial emissions (integral prevention and control of pollution) (amended)...”

### Step 3

With reference to the step 3, there was no immediate abolition of the part of the “fee for renewable sources” which is directed to small hydropower plants, and which is paid by all citizens and legal entities in the Federation of Bosnia and Herzegovina as part of their monthly electricity bills.

#### B. Medium-term measures:

With relation to the proposed medium-term measures, there has only been a shift in relation to the proposed measure 2, which demanded the protection of the living world from the operation of the **existing SHPPs** through the amendment of by-laws. Namely, a new Rulebook on Amendments to the Rulebook on the Method of Determining Environmentally Acceptable Flow was adopted (“Official Gazette of the FBiH,” No. 63/22). With these changes, following the requests of the members of the Coalition in Article 24, there is an imposed necessity to connect hydrological stations for continuous monitoring of ecologically acceptable flow (EAF) to the water information system of the competent water agency. This means that the **environmentally acceptable flow will now be monitored in real time**. This change is very important for determining the pressure on watercourses where the SHPPs have already been built. Namely, the occurrence of dry riverbeds is not rare because investors tend to divert all the water into the pipes of the SHPPs, which is illegal. The problem was to prove this illegality in a timely manner, because the competent water inspectors, due to capacity limitations, were not up-to-date to control the situation on the ground, and even if they did go to the field, they were obliged by the law to inform the investors-owners of the SHPP about their visit, who would then prepare the “scene” in such a way that they would let part of the water back into the riverbed and thus cover up the violation of the regulations during inspection. As soon as the water inspection left, all the water got diverted back into the pipes. With this amendment to the Rulebook, citizens will no longer depend on the field trips of water inspections to collect credible evidence to demonstrate the absence of the EAF, as all irregularities will be available online in real time. Furthermore, with this change, the installation and connection of hydrological stations for continuous monitoring of



the EAF in the water information system of the competent water agency is **a condition for issuing a water permit**, and **the SHPP investors who already have water permits are obliged to harmonize** with the new provisions of the Rulebook **within one year from their entry into force!** Through the adoption of this Rulebook, harmonization with the provisions of the Framework Directive on EU waters, i.e. Directive 2000/60/EC on the establishment of a framework for Community action in the field of water policy and subsequent amendments to the Directive is significantly achieved.

Request 2 from the table sent to the competent institutions was fully accepted by the members of the Coalition. Namely, with this request, the members of the Coalition requested amendments to the Rulebook on establishing conditions, criteria for approval and maintenance of certification for members of expert commissions for the evaluation of activity plans and studies on environmental impact assessment in the process of issuing an environmental permit (“Official Gazette of the FBiH”, No. 94/12). This amendment was requested because persons who were in the expert commissions were not adequate experts or did not possess the practical knowledge necessary for evaluating the studies, or they were simply not impartial enough considering that they approved studies that had not been expertly prepared, especially with relation to the studies for issuing environmental permits for the SHPP. In 2021, the FMOIT adopted the Rulebook on determining the conditions and criteria for placing on the list of experts who can be appointed to expert commissions for the evaluation of environmental impact studies (“Official Gazette of the FBiH”, number: 63/21). This Rulebook considerably tightens the criteria related to the selection and appointment of persons to expert commissions for the assessment of environmental impact studies. It is important to point out that based on the achieved cooperation and the comments sent by the members of the Coalition, the FMOIT started drafting an additional Rulebook on the conditions and criteria for granting authorization to the holders for the preparation of the environmental impact study, the manner and criteria that must be met by the holders for the preparation of the environmental impact study and the fees for issuing authorizations to holders for the preparation of environmental impact studies (“Official Gazette of the FBiH” number: 19/22, 36/22). This Rulebook also improved the criteria in relation to those responsible for the preparation of the environmental study, which is very important especially if one takes into account previously prepared studies that were often inaccurate in terms of data, as well as plagiarism. For example, Article 13, paragraph (1) section b), sub-section 4) states that: “...if within a period of 24 months from the date of authorization, two studies or two documents prepared by the authorized person have been evaluated by the expert commission of the Ministry that they contain untrue, incomplete and/or unfounded and/or inconsistent data, it can **delete them from the list** of authorized persons” (i.e. the holder of the study). The aforementioned Rulebooks also follow the provisions of the Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (codification), which was amended by Directive 2014/52/EU.

Also, request no 3 from the table sent to the competent institutions by the members of the Coalitions was fully accepted. Namely, the FMOIT, in accordance with the suggestions of the members of the Coalition, adopted the Rulebook on the method of establishment and work of expert commissions for the evaluation of environmental impact assessment studies in the process of issuing environmental permits for plants for the production of hydroelectric power (“Official Gazette of the Federation of Bosnia and Herzegovina”, number: 9 /21). The key aspect of the amendments to this Rulebook is that in the Article 3, paragraph (4) section d) it is specified that within the Commission there must be “[one] expert member, a representative of an association or foundation for environmental protection, proposed by the **Coalition for the Protection of Rivers of BiH** or with the written consent of at least two associations/foundations registered in the territory of the Federation BiH in the field of environmental and nature protection.” Furthermore, a special innovation and a direct proposal of the members of the Coalition is included within the Article 9, paragraph (4) of the Rulebook, where it is

determined that the Commission bases its assessment of the study “...on the assessment of **the minimum threshold**, as follows: [m]imum threshold at which the study meets the minimum conditions for acceptance imply: a) that the information in the **study is correct**; b) to refer to **credible and relevant sources/references**; c) that it was prepared in accordance with the deadlines; d) that, for the purposes of the study, the **necessary field research of the area**, such as biological, ecological, hydrological, geological, geographical and demographic research was carried out...” Namely, practice in the field has shown that environmental impact assessment studies were made in such a way that the texts of analyses done for completely different areas and rivers were actually copied and plagiarized, and that such data was then used and attached for the purpose of approving the previous study estimates for other cases. It is precisely on the basis of such inaccurate and insufficiently performed analyses that many environmental permits for the SHPPs were obtained. In order to end this, the Coalition demanded the presence of impartial members from the NGO sector, and setting the specified minimum threshold, based on the logic that it does not make sense to take as relevant a study that did not even comply with the minimum conditions, and that the attached data are correct, that field research was really done instead of plagiarizing the data from other studies, etc. However, when the Ordinance on projects requiring an environmental impact assessment and projects for which it is decided on the need for an environmental impact assessment and the Ordinance determining plants and facilities that must have an environmental permit came into force, **the issuing of environmental permits for the SHPP was suspended**, so this Rulebook has become redundant. However, these Ordinances clearly indicate the mandatory implementation of an environmental impact assessment for all hydropower plants, where the FMOIT issues a special decision that determines the scope of the study and the content of the study. For this reason, the FMOIT adopted a new Rulebook on the content of environmental impact studies (“Official Gazette of the Federation of Bosnia and Herzegovina”, number: 63/21), which reflects the provisions of the minimum threshold from the Rulebook on the method of formation and work of expert commissions for the evaluation of environmental impact assessment study in the process of issuing an environmental permit for plants for the production of hydroelectric power.

### C. Long-term work – aimed at the preservation of water wealth, implies comprehensive water protection

With relation to the long-term work of the competent institutions in accordance with the attached requirements of the Coalition, the issue of passing the Law on River Protection (in order to resolve possible conflicts of norms in the existing legal framework), as well as the constitutional protection of water and the right to drinking water, has not yet been raised. Recently, members of the Coalition began preparing a text that has been sent to the FBiH Government with the aim of proposing amendments to the Constitution of the FBiH for the declaration of water as a constitutionally protected good in the FBiH and the same process will be initiated in the RS. At the same time, it is certainly necessary to work on the amendments to the FBiH Water Law (“Official Gazette of the Federation of BiH”, No. 70/06), the draft text of which has been in the parliamentary procedure since 2017.

#### 3.1.3 Examples of reactions of cantons, cities and municipalities to the Conclusion of the FBiH Parliament on the complete ban on the construction of SHPP on the territory of FBiH

On June 23, 2020, the House of Representatives of the Parliament of the Federation of Bosnia and Herzegovina adopted the Declaration on the Protection of Rivers and voted the Conclusion on the complete ban on the construction of the SHPP on the territory of the FBiH; expressing for the first time a clear position of this legislative institution that the SHPPs have no future in the FBiH. Given that the declaration did not have legal force, the members of the Coalition for the Protection of Rivers of Bosnia and Herzegovina started lobbying for legal changes. However, at the same time, as before, new cases of possible construction of the SHPPs appeared throughout Bosnia and Herzegovina.

For this reason, environmental activists decided to use the adopted Declaration in order to stop those projects, in cooperation with the members of the Coalition. Even though it is of a declarative nature, taking into consideration that it was adopted at the Federation level, urging the competent institutions to regulate laws and regulations with the aim of **completely banning the further** construction of the SHPPs in the FBiH, the Declaration was crucial for stopping new projects while the amending legal framework was in progress. Below is an overview of the most significant examples:

- On June 30<sup>th</sup> 2020, Kakanj Municipal Council adopted the Decision on the rejection of the previous consent for granting the concession for the construction of “Trstionica” SHPP, **referring to** the Conclusion on the complete ban on the construction of small hydroelectric power plants on the entire territory of the FBiH!
- On January 26<sup>th</sup> 2021, the Assembly of Herzegovina-Neretva Canton, adopted a Conclusion requesting the Government of Herzegovina-Neretva Canton to review the granted concessions for the SHPPs in protected areas of nature and all SHPP that were not built within the stipulated deadlines, with special reference to the **“Buna I” SHPP and the “Buna II” SHPP on the Buna River!**
- On February 11<sup>th</sup> 2021, the Ministry of Agriculture, Water Management and Forestry of Zenica-Doboj Canton refused to conclude a concession contract with the investor for the “Očevlja” SHPP in Vareš, also referring to the Conclusion on the complete ban on the construction of small hydroelectric power plants on the entire territory of the FBiH!
- In July 2021, at the sixth regular session of the Donji Vakuf Municipal Council, the granting of prior approval for the construction of the small hydroelectric power plants “Krivače 1” and “Krivače 2” on Vrbas River was **unanimously rejected**. With this decision, the eighteen present councilors supported the civic initiative in the fight against the construction of these facilities. Also, they adopted a Conclusion stipulating that the issue of hydropower plant construction permits on the Vrbas River and its tributaries **will not be placed** on the agenda of the Donji Vakuf Municipal Council **in the next 20 years**.
- On October 7<sup>th</sup> 2021, in accordance with the demands of the citizens presented at the public discussions, the Travnik Municipal Council expressed a negative attitude regarding the planning of new small hydropower plants in the 2005 – 2025 Spatial Plan of the Central Bosnia Canton. According to the adopted opinion, there is no consent of the Municipal Council for the construction of small hydropower plants if the local community on whose territory construction is planned had not previously given consent!
- On October 22<sup>nd</sup> 2021, at the session of the Jajce Municipal Council, the “Municipality without Dams” Declaration was adopted, by which the local government expressed a clear political will to put itself at the service of protecting current and future generations and their rights to water and a quality environment. Also, according to the proposal of activists from Jajce and the Coalition, the position was adopted through the Conclusion that the planning of new small hydropower plants in this municipality **will not be allowed, nor will concessions be issued for these facilities**.
- Mayors from all over Bosnia and Herzegovina have signed the Declaration of “Municipalities without Dams” modeled on the “Declaration on the Protection of Rivers of the Western Balkans,” expressing the intention that such facilities would no longer be built in their municipalities and cities, including the cities of East Sarajevo, Bihać, Banja Luka, Novi Travnik Municipality, Jajce, Sarajevo Center Municipality, etc.

### 3.2 Moratorium on the SHPP in the Republika Srpska

Compared to the FBiH, the path to a complete ban on the construction of hydropower plants in the Republika Srpska is significantly slower. The key reason for this can be attributed to the limited cooperation of the competent institutions in the RS with relation to the demands of the Coalition members, who, due to the greater number of planned SHPPs in the FBiH, devoted their daily activities primarily to the amendments of the complex legal framework in the FBiH. Namely, in contrast to the RS, in the FBiH, in addition to entity competences in the environmental sector, ten different cantons have shared competence, each with its own specific environmental laws, while at the local level there are also different city and municipal regulations. In the RS, in addition to the entity competences, there are also city and municipal competences, where the essence of the SHPP construction problem is related to the RS institutions such as the Ministry of Energy and Mining, the Ministry of Spatial Planning, Construction and Ecology and the Ministry of Agriculture, Forestry and Water Management. Particularly problematic is the work of the Ministry of Spatial Planning, Construction and Ecology, which, despite its mandate of “environmental protection”, i.e. “and ecology” in many cases of the construction of the SHPPs in the RS favored the interests of investors, without even considering the need to protect the rivers in the vicinity of national parks or protected areas or which are planned to become so in the near future.

Despite the more modest cooperation with the competent institutions in the RS, the members of the Coalition still managed to impose the importance of the “Declaration on the Protection of Rivers of the Western Balkans” to those institutions, so based on this Declaration, on February 17, 2021, the National Assembly of the RS adopted the Declaration on the Protection of Rivers in the Republika Srpska (“Official Gazette of RS,” No. 17/21). With the adopted Declaration, the National Assembly of the Republika Srpska tasked the Government of the Republika Srpska with the following:

1. “...that within the **next six months**, at the latest, perform an analysis of all concluded contracts on the granting of concessions for the construction and use of hydroelectric power plants in the period from 2005 to 2020;
2. **to suspend the consideration of the request for granting concessions** for the construction and use of small hydropower plants until the activity from paragraph 1. is implemented;
3. that, in the process of adopting new regulations on renewable energy sources, **limit the granting of public incentives** for the production of electricity in small hydroelectric power **plants as much as possible**, and to encourage the production of electricity in plants that use other types of renewable energy sources;
4. to start or speed up the process of applying European Union standards, especially those provided in the **Habitats Directive, the Birds Directive, the Water Framework Directive**;
5. to expand existing and establish new protected areas, including areas of water bodies intended for the protection of natural species and sensitive habitats, and to increase the network of protected areas and ecological corridors and thus bring the Republika Srpska closer to the European network “**NATURA 2000 and the Emerald network**”;
6. to adopt, apply and provide mechanisms for the implementation of regulations on **ecologically acceptable flow of rivers**, with a methodology for determining this flow based on a scientific basis, to establish a system of automatic monitoring of the state of watercourses and to ensure that monitoring data is available **in real time** as a prerequisite for more adequate inspection and civil supervision;
7. to support all activities that nurture and encourage a positive attitude towards rivers and surrounding ecosystems, and with the aim of comprehensive development of the Republika Srpska...”

Of all the items listed above, only item 3 has been complied with and in a few examples paragraph 5 as well. Namely, at the beginning of 2022, the new Law on Renewable Energy Sources of the Republika Srpska (“Official Gazette of the Republika Srpska“, No. 15/22) entered into force. This new Law as a whole in its text represents a major shift in relation to harmonization with the EU acquis, considering that for the first time it adequately enables citizens to produce renewable energy for their own needs, by recognizing the importance of “civic energy,” where it enables and facilitates administrative process to citizens who have the opportunity and want to produce energy for their own needs. The new incentive system for renewable energy projects is based on auctions, which means that an auction or tender will be announced for each new project, in which all received offers will be evaluated. The auction system **is not intended for small hydropower plants**, which means that they will not be considered and given incentives! Therefore, the greatest success is precisely **the cancellation of incentives for small hydropower plants with an installed capacity of more than 150 kW**, and the limitation of incentives for microhydropower plants for which there was a counter-initiative to increase that power to 500 kW, which is actually one of the recommendations of the Energy Community (CZZS, 2022 ). It should be noted that this Law follows the provisions of EU Directive 2018/2001 on promoting the use of energy from renewable sources in relation to facilitating administrative processes for citizens to produce electricity for their own needs. However, there has still not been effective harmonization with the Directive in relation to other key aspects such as energy efficiency, calculation of the share of energy from renewable sources, etc.

This is a significant success, but compared to the Federation of Bosnia and Herzegovina, it can be concluded that the FBiH follows the position of **full prohibition** of incentives for the SHPP, in accordance with the text of the Draft Law on the use of RES and EC. Furthermore, according to the already adopted amendments and additions to the new FBiH Law on Electricity, the issuance of **energy permits for all SHPPs has been suspended**, and given that without energy permits, these facilities cannot be legally built, this results in their de facto suspension in relation to construction. Therefore, it can be concluded that the **FBiH has taken a step forward** and that this trend is followed in the Draft of the new Law on Electric Energy of the FBiH and in the Draft Law on the use of RES and EC. The Federation of Bosnia and Herzegovina is certainly leading in relation to other adopted laws and regulations. For example, with relation to the competences of the Republika Srpska Ministry of Agriculture, Forestry and Water Management, the Ministry has had a Rulebook on the Method of Determining Environmentally Acceptable Flow since 2013 (“Official Gazette of the FBiH,” No. 4/13), which was again amended and substantially harmonized with the requests of the Coalition members in the adopted Rulebook on Amendments to the Rulebook on the Method of Determining Environmentally Acceptable Flow (“Official Gazette of the FBiH,” No. 63/22). However, in the RS, such a Rulebook **has never been adopted!** For this reason, one of the continuous efforts of the members of the Coalition is to have this Rulebook adopted as soon as possible in order to be able to adequately monitor the work of the already built SHPPs in the Republika Srpska.

### 3.3 Observations of the members of the Coalition for the Protection of Rivers of BiH in relation to joint activities aimed at preventing further construction of hydropower plants in BiH

When it comes to the dedication and commitment in their efforts aimed at protection, it can be concluded that the work of the members of the Coalition for the Protection of Rivers of Bosnia and Herzegovina is indisputable. In particular, their advocacy stands out for the protection of rivers and human rights with a focus on the right to access water, and a clear message that water is the source of life. Pragmatic application of the fact that water is the “source of life” and that rivers “have no borders” is the mantra that all other principles of the Coalition activities originate from. It was on this strong

internal conviction, motivated by the numerous examples of arrogant and cruel exploitation of rivers and the people who depend on them, in addition to all other flora and fauna, that the idea arose for effective and long-term protection of rivers and water resources in BiH, which truly represent immense beauty, and the wealth of this country. This undertaking turned out to be extremely exhaustive and complex due to the complex socio-political and administrative structure of BiH, whose economic and political activity is intertwined with almost insatiable corrupt and criminal bonds of the political elite. It is precisely in such a toxic environment that the members of the Coalition have been working dedicatedly for many years, and their convictions, enthusiasm, sacrifice and stubbornness saved river after river from the arrogant anger and noise of bulldozers. But, given the glutton hunger of investors to use every river in BiH for commercial purposes, the members of the Coalition were forced to advocate an effective legal solution, from which the idea of a moratorium was finally born, i.e. the idea of a full ban on the further construction of hydropower plants in BiH, included in the Declaration on the Protection of Rivers of the Western Balkans. So, the intensification of the fight for legal changes to prevent the further construction of the SHPPs in BiH follows the period from the moment of drafting of this Declaration, and then the lobbying for its principles in the form of laws and regulations for the last three years, with which the majority of respondents of the Questionnaire agree (Appendix A).

In order to fight for the protection of rivers more effectively, a joint action has always been crucial. For this reason, most members of the Coalition primarily work as part of a separate NGO within the Coalition, and the vast majority of them – **75%** – **work there as volunteers!** (Appendix A).

Also, in the opinion of all respondents to the Questionnaire (Appendix A), the joint action within the Coalition for the Protection of Rivers of BiH contributed to legal changes in relation to preventing the further construction of the SHPPs in BiH, where 82% of respondents believe that a combination of: meetings held with competent representatives of institutions and/or to individuals; organizing peaceful protests; media campaign; pressure on competent institutions and/or individuals via social networks and submission of agreed positions to competent institutions **was key to speeding up** the legal changes with relation to preventing further construction of the SHPPs in BiH. As much as 99% of respondents believe that the Coalition has become a relevant advocacy movement from the perspective of communication and negotiations with the competent institutions.

With reference to the improvement of advocacy approaches in the competent institutions in the process of legal changes to prevent the further construction of the SHPPs in BiH, some of the respondents proposed the following:

- strengthening the capacity of the Coalition through the inclusion of expert individuals from the fields of ecology, hydrology, energy, etc.;
- strengthening contact and lobbying at the level of entity governments by holding continuous meetings with representatives of institutions;
- the establishment of a special team for amending the law, as well as a team for monitoring decisions in relation to the amendment of the law to prevent the further construction of the SHPPs in order to participate in the drafting of strategic documents, where the team, in addition to other experts, would also consist of persons with analytical skills and knowledge in political science;
- additional training of the Coalition members and strengthening of internal communication;
- strengthening media pressure and civil pressure on institutions;
- formation of the Green Party.

All respondents believe that it is necessary to intensify legal changes to prevent the further construction of the SHPPs in the Republika Srpska, where the majority of respondents pointed out that it is necessary to exert media pressure, lobby political parties and organize protests in order to intensify legal changes to prevent the further construction of the SHPPs in the Republika Srpska. Also, all the respondents believe that it is necessary to strengthen the cooperation with the competent institutions in order to advocate the further prohibition of the construction of the SHPPs in Bosnia and Herzegovina.

In relation to the issue of strengthening cooperation with competent institutions in order to advocate for the remaining legal changes to ban the further construction of the SHPPs in BiH, the majority of respondents believe that it is necessary to exert **continuous pressure** through **joint action** within the Coalition in the form of organizing meetings, as part of a special negotiating team, and in parallel to continue media coverage and pressure.

Below are some of the messages that the respondents sent to the competent institutions in relation to the legal changes for the protection of rivers from the SHPPs:

“Respect the will of the people.”

“We are also citizens of this country, citizens with all our rights, and the right to oppose the decisions made by the Government! Petitions, peaceful protests, changes to the law, victory! The state exists for its citizens, not for the interests of investors.”

“Do your job.”

“We are your partners if you want to protect the environment.”

“It is not too late to act; I hope you see what is really in the interest and well-being of all of us and future generations.”

“Rewrite the European laws, respect the international Directives on the protection and preservation of water bodies, respect the existing laws, change the laws that bring the environment into a state of degradation, do not sell the treasures of your country for small coins. Ahead of us are centuries with plenty of electricity and little clean water.”

“The sooner you adopt laws to prevent small hydropower plants, the more you will contribute to the protection of rivers, because every day our rivers get more and more concreted.”

“Respect the clearly expressed will of the citizens and ban the construction of these ecocidal power plants once and for all.”

# Chapter 4.

## RECOMMENDATIONS AND CONCLUSIONS

Indeed, advocating for the prohibition of further construction of the SHPPs represents a precedent in the world, which means that with the latest legal changes BiH has become a world leader. Following the work of NGOs in the field of environmental protection, especially those gathered within the Coalition for the Protection of Rivers of BiH, it can be concluded that the dedicated work of the members of the Coalition, stimulated by the support and appeals of citizens throughout BiH, was the *sine qua non* (lat. “without which not” or “without which it cannot/couldn’t”) for the protection of rivers “case by case,” and finally for promoting an integrated approach to overall protection through specific legislative changes. Based on the agreed list of demands sent to the Federation institutions in relation to legal changes to prevent further construction of the SHPPs in the Federation of Bosnia and Herzegovina, it can be concluded that a significant progress has been made and that the final legal solution, i.e. a complete moratorium, has come a long way. In the Republika Srpska, these changes are advancing more slowly, but still, a significant progress was achieved with the entry into force of the new Law on RES. All these legal changes also create a new environmental policy within BiH and form a stronger and louder awareness of the importance of BiH’s natural resources and the need for their more adequate protection. Unfortunately, current trends have shown the practice of environmental policies and laws to be incompatible within the ecological-economic discourse, where economic development is a constant opponent and competitor of ecological protection principles. Precisely on the example of the construction of the SHPPs and the prevention of their further construction, this difference was clearly emphasized by the investors, who often perceived the river through an exclusive economic-energy lens. On the other side, the efforts of the members of the Coalition have shown that preserved nurtured rivers within protected areas can also be a strong economic potential realized through tourism, where protection would be applied in a balanced way and it would lead to the sustainable development in the true sense of the word. This goal can only be achieved by a permanent ban on unsustainable and destructive projects such as SHPPs, and by spatial planning and efficient management of natural resources through extensive procedures of prior environmental impact assessment before granting concessions, and by limiting the number and method of issuing concessions for the all the future so-called development projects. It is certainly very important to protect the right to access water within the constitutions as a fundamental human right. In order to achieve these goals in the coming period, it is necessary for the competent institutions in the RS and the FBiH to complete the amendments of the legal framework for preventing the further construction of the SHPPs by adopting other proposals of the Coalition members, which include:



- amendments to the Constitution of the RS and the Constitution of the Federation of BiH and to the constitutions of all 10 cantons on water protection and the right to drinking water;
- termination of all concession contracts for new SHPPs and revision of the existing ones;
- defining the responsibility of competent institutions and individuals in the process of obtaining permits for SHPPs that are in operation;
- reform of inspection bodies and the judicial system in relation to the way environmental cases are treated.

As for specific legal changes, it is urgently necessary to:

- adopt the new Law on Electricity of the FBiH and the Law on the Use of RES in the FBiH in accordance with the comments of the Coalition members, with special emphasis on the omission of SHPPs as a RES and with reference to the provision of incentives;
- harmonization of all regulations within the jurisdiction of FMERI, after the adoption of the new Law on Electricity of the FBiH and the Law on the use of Renewable Energy Sources and the FBiH;
- amend the Law on Concessions of BiH, FBiH, and the RS (and harmonize the individual laws of the cantons with the new Law on Concessions of FBiH) in such a way as to suspend the issuance of concessions for SHPPs up to 10 MW, as well as to prevent the process of self-initiated offers by investors in the process of conclusion of concession contracts for these facilities;
- change the FBiH Water Law (correct linguistic inconsistencies and contradictions in relation to the “public good” regarding the use of rivers for the construction of hydropower plants, and in accordance with new EU directives, tighten protection systems and penalty provisions for illegal use of water resources);
- adopt the Law on the Protection of Rivers in the FBiH and in the RS (if possible, as a separate law, i.e. *lex specialis*, in order to resolve possible conflicts of norms in the existing legal framework);
- change the Law on Nature Protection in the FBiH and in the RS (absolute ban on the construction of SHPP in protected areas);
- to change the Law on Spatial Planning and Land Use at the level of FBiH (and harmonize separate cantonal laws with the new amendments to this Law) as well as the Law on Spatial Planning and Construction of the RS, in such a way as to omit the possibility of planning new SHPPs, while allowing the expansion and creation of new protected areas with effective and clear protection mechanisms;

- adopt the Rulebook on environmentally acceptable flow in the RS (in accordance with the NGO comments);
- adopt amendments in the Law on Administrative Procedure in the FBiH and in the RS (in relation to the way decisions are made and their legal force);
- change to the Law on Administrative Disputes in the FBiH and in the RS (that a lawsuit in court prevents the execution of the decision).

In the Republika Srpska, it is necessary to intensify legal changes by exerting joint pressure from all members of the Coalition, which includes the increase the frequency and setting of continuous meetings with the competent institutions, stronger media presence and presence in the field with reference to individual cases of the already commenced SHPP construction. ■■■

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# Appendix A

## Questionnaire: Stopping further construction of the SHPPs in Bosnia and Herzegovina

### Purpose of collecting information:

information is collected for the preparation of the *Analysis of Legal Changes in relation to the prevention of further construction of the SHPPs in BiH*, and will only be used for these purposes. The client of the analysis is the Heinrich Böll Stiftung Foundation, which provided the financial support for the research and its publication.

The data is processed in an aggregate manner and anonymously, which means that individual responses will not be singled out.

Thank you very much for your time.

#StopMHE

E-mail\*

Valid e-address

- 
1. Do you work individually or as part of an NGO within the Coalition for the Protection of Rivers of Bosnia and Herzegovina?
    - individually
    - within the NGO within the Coalition for the Protection of Rivers of Bosnia and Herzegovina
  
  2. Choose the option that best describes your way of working within the Coalition for the Protection of Rivers of Bosnia and Herzegovina?
    - mostly volunteering
    - mostly for a fee as part of projects/donations
    - other \_\_\_\_\_
  
  3. In your opinion, when did the fight for legal changes to prevent further construction of the SHPPs in BiH intensify?
 

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_
  
  4. Do you think that the joint action within the Coalition for the Protection of Rivers of BiH contributed to the legal changes in relation to preventing the further construction of the SHPPs in BiH?
    - YES
    - No
  
  5. In your opinion, which joint activities within the Coalition for the Protection of Rivers of Bosnia and Herzegovina were key to speeding up legal changes in relation to preventing the further construction of the SHPPs in Bosnia and Herzegovina?
    - meetings with the competent representatives of institutions and/or individuals
    - organizing peaceful protests
    - media campaign
    - pressure on the competent institutions and/or individuals via social networks
    - submission of agreed positions to the competent institutions
    - ALL of the above
    - Other: \_\_\_\_\_
  
  6. Do you think that the Coalition for the Protection of Rivers of Bosnia and Herzegovina has become a relevant advocacy movement from the perspective of communication and negotiation with the competent institutions?
    - YES
    - NO
  
  7. In what way would you improve the advocacy approach with the competent institutions in the process of legal changes to prevent further construction of the SHPPs in Bosnia and Herzegovina?
 

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. Do you think it is necessary to intensify legal changes to prevent further construction of the SHPPs in the Republika Srpska?

- YES
- NO

9. In what way would you intensify legal changes to prevent further construction of the SHPPs in the Republika Srpska?

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10. Do you think it is necessary to strengthen the cooperation with the competent institutions for the purpose of advocating a further ban on the construction of the SHPPs in Bosnia and Herzegovina?

- YES
- NO

11. In what way would you strengthen the cooperation with the competent institutions in order to advocate for the remaining legal changes to prohibit the further construction of the SHPPs in BiH?

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12. A short message for the competent institutions with relation to legal changes for the protection of rivers from the SHPPs:

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