

Gone with the Flow

A case study of biodiversity loss caused by Ilovac
Hydropower plant, Croatia



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Introduction

Main goal of the study

This case study aims to demonstrate that the EIB's environmental and social (E&S) and transparency policies are insufficiently equipped to prevent the negative impacts of hydropower plants on sensitive ecosystems, in particular when the hydropower project (1) is financed via an intermediary bank and/or (2) is located outside of the EU.¹ The case study focuses on the Ilovac small hydropower plant in Croatia, financed by the European Investment Bank (EIB) via the Croatian Bank for Reconstruction and Development (HBOR).

The EIB's environmental and social policies in relation to hydropower

The EIB's E&S policy has several layers that differ in their levels of commitment, application and detail. At the top of the hierarchy is **the EIB Statement on Environmental and Social Principles and Standards (Statement)**. This sets out the EIB's general commitments on environmental and societal challenges. It has not been changed since 2009. The EIB has announced that the Statement will be revised in the second quarter of 2020.²

The second layer is the **Environmental and Social Handbook (Handbook)** that operationalises the Statement in the Bank's day-to-day work. It has two parts:

(1) The EIB Environmental and Social Standards (E&S Standards) that outline the requirements that a client of the Bank needs to fulfill, and

(2) The EIB Environmental and Social Practices and Procedures (E&S Practices and Procedures) that provide detailed instructions for EIB staff on the implementation of the Statement and E&S Standards.

Version 10.0 of the E&S Standards was published in 2018. However, the E&S Practices and Procedures was removed from the website in 2018 until the revision process of the Statement and E&S Standards is finished, when it will be published again as part of the complete Handbook.³ Until then, version 9.0 of the E&S Practices and Procedures is still valid, but is available only on demand.

Development of an **EIB Standard on Financial Intermediaries** was announced in late 2017 and should be integrated into the E&S Standards revision announced for 2020. This Standard should more closely regulate the obligations of EIB clients that are financial intermediaries – banks and funds that redistribute EIB's money, typically to smaller projects. This Standard is relevant because a significant proportion of investments in small hydropower plants go through financial intermediaries, and so far these have been hidden from the public eye because of banking secrecy rules.⁴

While the previous policies apply to all sectors, the bank has also developed **the EIB's Environmental, Climate and Social Guidelines on Hydropower Development (Hydropower Guidelines)**, which clarifies the E&S Standards when applied specifically to hydropower. Published in October 2019, the Guidelines had an open process of public consultations not typical for this type of document. The Guidelines contain very useful sections and requirements such as the referral of hydropower projects financed via financial intermediaries to the EIB for due diligence, public disclosure of hydropower projects by the financial

¹ The loan to HBOR that was used for financing the Ilovac plant was signed in 2012, before Croatia's accession to the EU.

² European Investment Bank, email to the author, 6 December 2019. Link to Handbook version 9.0 available in the References section.

³ Ibid.

⁴ Outsourcing Accountability? The EIB's Failure to Enforce Environmental Information Disclosure in Its Intermediated Loans, Bankwatch, 23 January, 2017, <https://bankwatch.org/publication/outsourcing-accountability-the-eib-s-failure-to-enforce-environmental-information-disclosure-in-its-intermediated-loans>.

intermediary,⁵ and the importance of a strategic approach to hydropower (i.e. that the impacts should be assessed first at the level of the river basin and only later on the project level).

The Hydropower Guidelines are a very welcome step forward to more transparent and more sustainable investments in the hydropower sector. However, some of their provisions are not yet embedded in the Statement or E&S Standards, such as those on Financial Intermediaries. Due to the fact that Guidelines do not legally bind the EIB,⁶ these clauses might not be consistently applied. Also, some of the requirements, such as the importance of a strategic approach to assessment, need to be clarified in the revised Statement and the E&S Handbook.

The EIB's Transparency Policy

The EIB Transparency Policy sets out the EIB Group's approach to transparency and stakeholder engagement. Although it requires transparency in the projects it finances, there are exceptions to this, and one of them is for "*information on individual allocations made by local banks to support investment by their own customers under credit lines established with the EIB. This information falls within the competence of the intermediary bank as part of the normal business relationship between the respective bank and its customers.*"⁷ This provision is a major hurdle for public participation in projects financed via intermediaries, including many hydropower projects.

The small hydropower boom in southeast Europe

This year's World Economic Forum Global Risk Report has identified biodiversity loss as the second most impactful and third most likely risk for the next decade.⁸ Southeast Europe has been repeatedly identified as a biodiversity hotspot on a global scale. Aquatic species and riparian ecosystems are among the most vulnerable. But over 2,000 hydropower plants are planned in the region. If all dams are built, 49 fish species will be faced with either the threat of extinction or the loss of between 50 and 100 per cent of their Balkan distribution. 11 of these are endemic, so they will become globally extinct. This means that 10 per cent of all of Europe's freshwater fish species are threatened by Balkan dams.⁹ Any biodiversity loss needs to be avoided, and the opportunity presented by the revision of the EIB E&S policies must be used to ensure such an outcome.

The case of Ilovac

Context

The Ilovac hydropower plant is located on the river Kupa in north-west Croatia in the Kupa Natura 2000 site (HR2000642). It is a run-of-the-river (ROR) plant, built on a previously existing weir near the small town of Ozalj, in the middle section of the Kupa, where it turns from an upland to a lowland river. The existing weir was upgraded with a concrete reinforcement and inflatable rubber element, raising the initial 1.3 m weir to a 3.4 m dam.¹⁰ On the right bank of the river, the power house hosts three turbines with a total installed capacity of 1.4 MW. The area of impact of the plant was estimated in the environmental impact assessment to stretch some 4 km upstream, up to a few hundred metres from the border with Slovenia.

⁵ Although it is not clear from the text of the Guidelines whether the projects will be disclosed before signing the contract with the final beneficiary, see page 3.

⁶ European Investment Bank, *Environmental, Climate and Social Guidelines on Hydropower Development*, 2019, 2, <https://www.eib.org/en/publications/environmental-climate-and-social-guidelines-on-hydropower-development>.

⁷ European Investment Bank, *Transparency Policy*, 2015, Article 5.14, 10, https://www.eib.org/attachments/strategies/eib_group_transparency_policy_en.pdf.

⁸ *The Global Risks Report*, World Economic Forum, 2020, <https://www.weforum.org/reports/the-global-risks-report-2020>.

⁹ Weiss, Steven et al., *Endangered Fish Species in Balkan Rivers: their distributions and threats from hydropower development*, Riverwatch & EuroNatur, 2018, https://balkanrivers.net/sites/default/files/Fish_Study_web.pdf.

¹⁰ The Karlovac County Spatial Plan (2008) prescribed 3 m as a limit in the lowland areas such as those in Ilovac – see page 36 (in Croatian).



Figure 1: Ilovac dam (source: BIOTA)

The hydropower plant was partially financed by a so-called Global Loan, provided by the EIB¹¹ to the Croatian Bank for Reconstruction and Development (HBOR) in 2012.¹² Initially, neither the EIB nor HBOR were ready to reveal any details about the signing of the specific loan agreement with the project promoter Tekonet doo. The EIB referred the authors to HBOR, and HBOR rejected the request based on banking secrecy rules. The exact signature date and the amount of public EU money invested in this project remained a secret until March 2020, when it was finally revealed¹³ that it was signed in 2014. The plant went online in 2015.

Since the loan to HBOR was extended in 2012, we assume that the project is subject to the rules outlined in the Statement and the then-public version 2.0 of the Handbook.

¹¹ iC consulenten Ziviltechniker GesmbH, “English Summary of the Non-Technical Summary of the Environmental Impact Assessment (NTS) prepared by Elektroprojekt D.D.: Ilovac SHPP”, European Investment Bank, March, 2013, <https://www.eib.org/en/registers/all/65376285>.

¹² European Investment Bank, “HBOR Loan for SMES and Mid-Cap III”, 2012, <https://www.eib.org/en/projects/loans/all/20110470>; European Investment Bank, email to the author, 29 November 2019.

¹³ A complaint submitted by Bankwatch to the EIB’s Project Complaint Mechanism in early 2019 resulted in a finding that the bank needed to re-examine Bankwatch’s request for information about hydropower financed via intermediaries in the Western Balkans, and this information was sent to Bankwatch on 10 March 2020.

The Environmental Impact Assessment carried out under the national legislation was approved in 2010.¹⁴ Two project versions were described in the EIA, and one was selected primarily on the basis of price,¹⁵ with environmental performance criteria considered only as a secondary criterion. No ‘without-project’ scenario was discussed. After that, the project design changed,¹⁶ and the project was permitted without an updated EIA.¹⁷

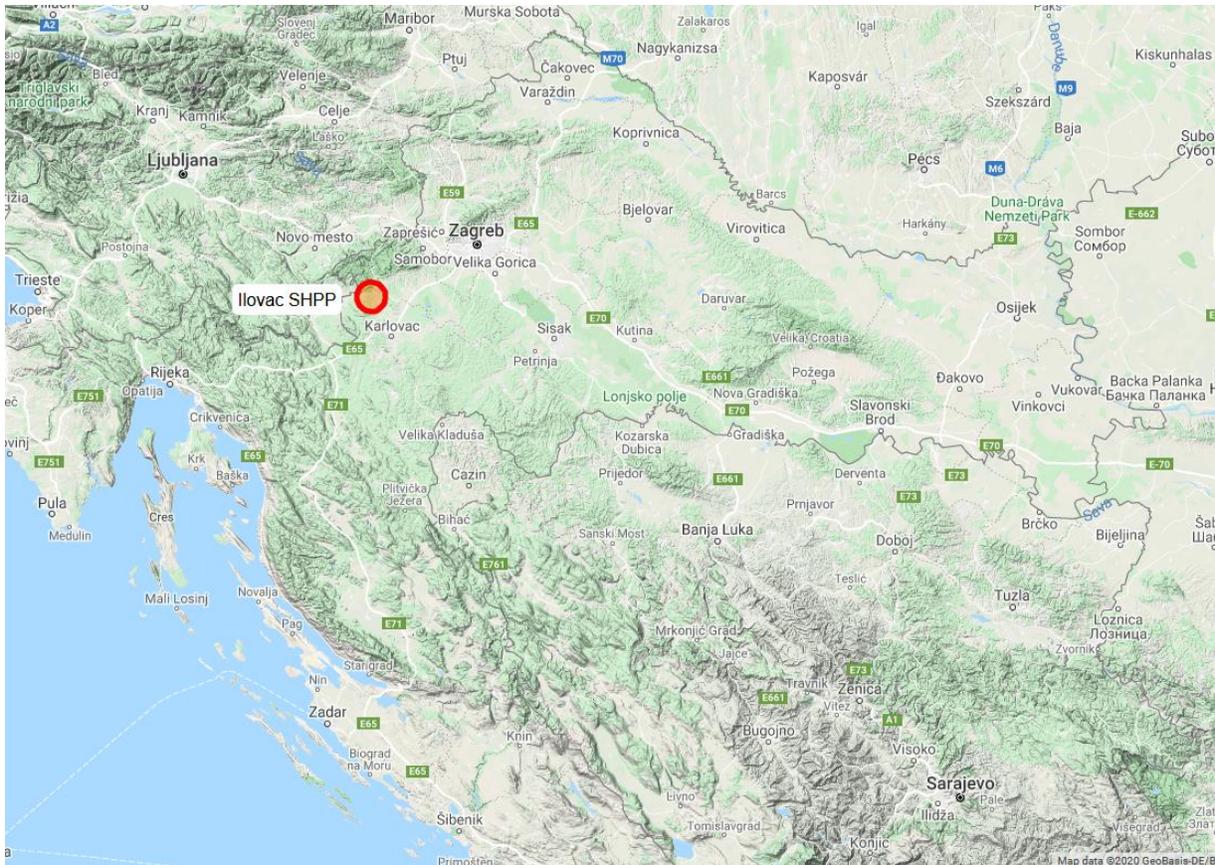


Figure 2: Location of Ilovac dam in the context of Croatia (made with GmapGIS)

On paper, the Ilovac hydropower plant checks all the boxes for a low-impact, climate-friendly investment. The emissions from the construction and operation of such a plant should be minimal. The ROR design should ensure that there is no dewatered section of the river, unlike with the diversion design that is planned for the majority of small hydropower plants in the region. A fish pass was planned for what the authors of the EIA study assessed is the only migratory species of fish – the Common nase (*Chondrostoma nasus*).¹⁸ Moreover, there should be no reservoir, but only a slight increase in the water level.

¹⁴ Ministry of Environmental Protection, Physical Planning and Construction, Rješenje 531-14-1-1-18-10-16 [Decision 531-14-1-1-18-10-16 (Environmental permit for Ilovac small hydropower plant)], 11 April, 2010, <https://drive.google.com/file/d/19nrc-sjMCZhrjzhW4oFT7S4tSDnPIR/view>.

¹⁵ Elektroprojekt, MHE na području Karlovačke županije: MHE Ilovac [EIA for the Ilovac small hydropower plant], 9 February, 2010, 43, <https://drive.google.com/file/d/1SFFIF5mJSwTmf43pA6S7kZiiiCeq3hlo/view>.

¹⁶ See Beraković, Boris, Eva Ocvirk, and Vesna Dragčević, “Stručna Podloga o Izmjenama Dopunama u Odnosu na Rješenje o Prihvatljivosti Zahvata MHE Ilovac”, Sveučilište u Zagrebu, Građevinski Fakultet, Zavod za Hidrotehniku, June, 2011, <https://drive.google.com/file/d/17Rrllye3MrShDsp2F1-8Kymq-7l-fO1y/view>.

¹⁷ Ministry of Environmental Protection, Physical Planning and Construction, Rješenje 531-14-1-1-18-10-16 [Decision 531-14-1-1-18-10-16].

¹⁸ iC consulenten Ziviltechniker GesmbH, “English Summary of the Non-Technical Summary of the Environmental Impact Assessment (NTS) prepared by Elektroprojekt D.D.: Ilovac SHPP”.

However, this case study demonstrates that due to failures in due diligence and monitoring, this plant has contributed to the loss of aquatic species in the river Kupa.

This case is also relevant from other perspectives. Although the environmental permitting for Ilovac happened before Croatia's accession to the EU, due diligence for the EIB/HBOR loan likely happened in 2013 or later, after Croatia joined the EU.¹⁹ Hence, lessons can be drawn for EIB financing in both EU and non-EU countries, particularly from the point of view of implementation of the Natura 2000 legislation, due to the project's location in a Natura 2000 site.

In addition, some information was made available about this project both in terms of the EIB's financing and the direct impacts of the project. The availability of information enabled a more comprehensive analysis than is usually possible for loans under intermediated projects. There are at least 21 more hydropower projects that received EIB financing in southeast Europe,²⁰ but limited information about them was only disclosed by the EIB in March 2020.

What's at stake: The river Kupa's biodiversity

The Ilovac project is in the Kupa Natura 2000 site (HR2000642). This designation protects 22 species listed in the Nature Directives and found at the site, as well as 6 habitat types specified by the Habitats Directive.²¹

Natura 2000	Species scientific name	English common name	Species group
5291	Alburnus sarmaticus	Pontian Shemaya	Fish
1130	Aspius aspius	Aral asp	Fish
5261	Barbus balcanicus	Danube Barbel	Fish
2533	Cobitis elongata	Balkan loach	Fish
5297	Cobitis elongatoides	-	Fish
1163	Cottus gobio	Freshwater sculpin	Fish
2485	Eudontomyzon vladykovi	Vladykov's lamprey	Fish
1105	Hucho hucho	Danube Salmon	Fish
5339	Rhodeus amarus	European bitterling	Fish
6143	Romanogobio kesslerii	Kessler's gudgeon	Fish
6145	Romanogobio uranoscopus	Danube gudgeon	Fish
5329	Romanogobio vladykovi	Danube white-finned gudgeon	Fish

¹⁹ For example, the NTS is dated October 2013.

²⁰ *Financing for hydropower in protected areas of southeast Europe: update*, Bankwatch, March 2018, <https://bankwatch.org/publication/financing-for-hydropower-in-protected-areas-of-southeast-europe-update>.

²¹ "Site Factsheet: Kupa", European Environment Agency, last modified 22 April 2019, <https://eunis.eea.europa.eu/sites/HR2000642>.

5345	Rutilus virgo	Cactus roach	Fish
5197	Sabanejewia balcanica	Balkan spined loach	Fish
1160	Zingel streber	Streber	Fish
1093	Austropotamobius torrentium	Stone crayfish	Invertebrates
6169	Euphydryas maturna	Scarce fritillary	Invertebrates
6199	Euplagia quadripunctaria	Jersey tiger	Invertebrates
1060	Lycaena dispar	Large copper	Invertebrates
1032	Unio crassus	Thick-shelled river mussel	Invertebrates
1337	Castor fiber	European beaver	Mammals
1355	Lutra lutra	Eurasian otter	Mammals

Table 1: List of animal species of Community interest under the Habitats Directive 92/43/EEC found in the area of Kupa Natura 2000 site (source: European Environment Agency)

The overall status of all these species and the impact of the Ilovac project on their habitats is unknown, since all the studies conducted prior to and after the project commencing mostly focused only on the exact spot of the planned dam and seemingly only on the fish species. The impact on the overall Kupa protected area was downplayed, as explained in more detail below (see the section on Appropriate Assessment).

Impact

What's known: loss of biodiversity and ecosystems

After at least four years of operation, the Ilovac hydropower plant has started to show its first effects.

At least five relevant ichthyological studies have been conducted:

- A 2009 study by Zagreb University (used as the baseline for the EIA),²²
- 2010-2011 research by the Croatian Institute for Biodiversity,²³
- 2017²⁴ and 2018²⁵ monitoring studies commissioned by the investor and conducted by the University of Zagreb, and
- 2019 monitoring commissioned by WWF Adria and conducted by BIOTA Ltd.

²² Cited in the EIA as Mrakovčić, M., Mustafić, P., Čaleta, M. (2009.) Značajke ihtiofaune i faune kopna područja MHE Ilovac, ZOOLOGIJSKI ZAVOD, Biološki odsjek, Prirodoslovno- matematički fakultet Sveučilišta u Zagrebu. The document is not available online.

²³ Cited in Vucić, Matej and Dušan Jelić, *Istraživanje ihtiofaune rijeke Kupe na području mHe „Ilovac”*, BIOTA, September 2019, 24-25, <https://drive.google.com/file/d/1bq0o4U8NoBU5Z-fbGOysbqGtpC9FTt7W/view>; English version at: <https://drive.google.com/file/d/1szbUZQObCneKgleLhb4Vxq-neCp2fZL/view?usp=sharing>.

²⁴ Mrakovčić, Milorad, Davor Zanella, and Zoran Marčić, “Praćenje faune riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja”, Prirodoslovno-matematički fakultet, Sveučilišta u Zagrebu, Biološki odsjek, Zoologijski zavod, 2017, <https://drive.google.com/file/d/1P1HpM4RO1zChsOLYUBP-Diq1YaFPufCV/view>.

²⁵ Mrakovčić, Milorad and Zoran Marčić, “Monitoring i ispitivanje riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja”, Prirodoslovno-matematički fakultet, Sveučilišta u Zagrebu, Biološki odsjek, Zoologijski zavod, Zagreb, 2018, <https://drive.google.com/file/d/1RHrKdCMOGH25g2WDjKxRVzlwTGXGPO8l/view>.

Comparing the studies done before and after 2015, one fact is indisputable: there has been a loss of biodiversity in the river of Kupa at the location of the Ilovac hydropower plant.

The studies, however, differ in assessing the scale and significance of the loss. The studies commissioned by the investor claim that the overall drop from 17 species found in 2009 to 15 below the dam and only 9 above the dam in 2018 can be explained by normal statistical variance and the limitations of the surveying method.²⁶ This study claims that the habitat remained conducive to rheophilic fish species (those attracted by fast-moving water).

The population of the NATURA 2000 species *Alburnus sarmaticus* in the River Kupa has recently even been described as a distinct endemic species, *Alburnus sava*.²⁷ The type locality of the paratype material was the small waterfall on which the Ilovac dam was built. This species has not been found there any more since the construction of the Ilovac hydropower plant. It is now known only from 6 locations in the Kupa, Sava and Dobra Rivers,²⁸ and is considered to be endangered.²⁹ The next section describes the impacts in more detail.

The study by BIOTA claims that the habitat has already changed into one supporting limnophilic fish species (those living in slow-moving, still or stagnant waters) and offers a finding of the invasive Pumpkinseed fish (*Lepomis gibbosus*) and the Common carp (*Cyprinus carpio*) as an indicator of such a change.

BIOTA's study claims a drop from 18 species surveyed in 2010 and 2011 to 11 in 2019 (counting species found both above and below the dam). The number of species of Community interest found during the sampling dropped from seven to three.³⁰

What's unknown: Wider impact on the Natura 2000 site

The overall impact of the hydropower plant on invertebrates and mammals in the Kupa Natura 2000 site remains unclear, as does its impacts on the fish species that are further upstream and downstream, both inside and outside of the impacted zone of 4 km.

Regarding invertebrates and mammals, the monitoring team commissioned by the operator mentions sightings of stone crayfish (*Austropotamobius torrentium*) and otter (*Lutra lutra*) but the authors also state that these sightings are anecdotal and not scientifically based.³¹

Within the 4 km zone, four cascades with similar characteristics to the weir that was upgraded by the Ilovac dam have been flooded by the increased water level caused by the plant. BIOTA demonstrated this by conducting a visual check during the low water season when the hydropower plant, incidentally, was not working. The low water level revealed the effects of the impoundment. By comparing photos from the visual check with previous photos, and satellite imagery,³² it can be concluded that the four cascades were flooded.

²⁶ Ibid., p.17-18

²⁷ Bogutskaya, Nina G., et al., "Description of a new species of *Alburnus* Rafinesque, 1820 (Actinopterygii: Cyprinidae: Leuciscinae) from the Kolpa River in the Sava River system (upper Danube drainage), with remarks on the general distribution of shemayas in the Danube", *ZooKeys* 688 (2017): 81 – 110, <https://doi.org/10.3897/zookeys.688.11261>.

²⁸ Vucić, Matej, Ivana Sučić, and Dušan Jelić, "New distribution data for *Alburnus sarmaticus* Freyhof & Kottelat, 2007 and *Telestes souffia* (Risso, 1827) in the Western Balkans", *Croatian Journal of Fisheries* 75, no 4 (2017): 137-142, <https://doi.org/10.1515/cjf-2017-0017>; personal communication with Dušan Jelić on Dobra.

²⁹ As part of *Alburnus sarmaticus* - <https://www.iucnredlist.org/species/135590/4154782>.

³⁰ Vucić and Jelić, *Istraživanje ihtiofaune rijeke Kupe na području mHe „Ilovac“*. See tables 2 and 3. The survey was carried out with the same effort as the one in 2010-2011, so they are comparable. Some of the fish species that were not detected could still be there, but in very small numbers.

³¹ Mrakovčić and Marčić, "Monitoring i ispitivanje riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja", 20.

³² Vucić and Jelić, *Istraživanje ihtiofaune rijeke Kupe na području mHe „Ilovac“*, 30-36.

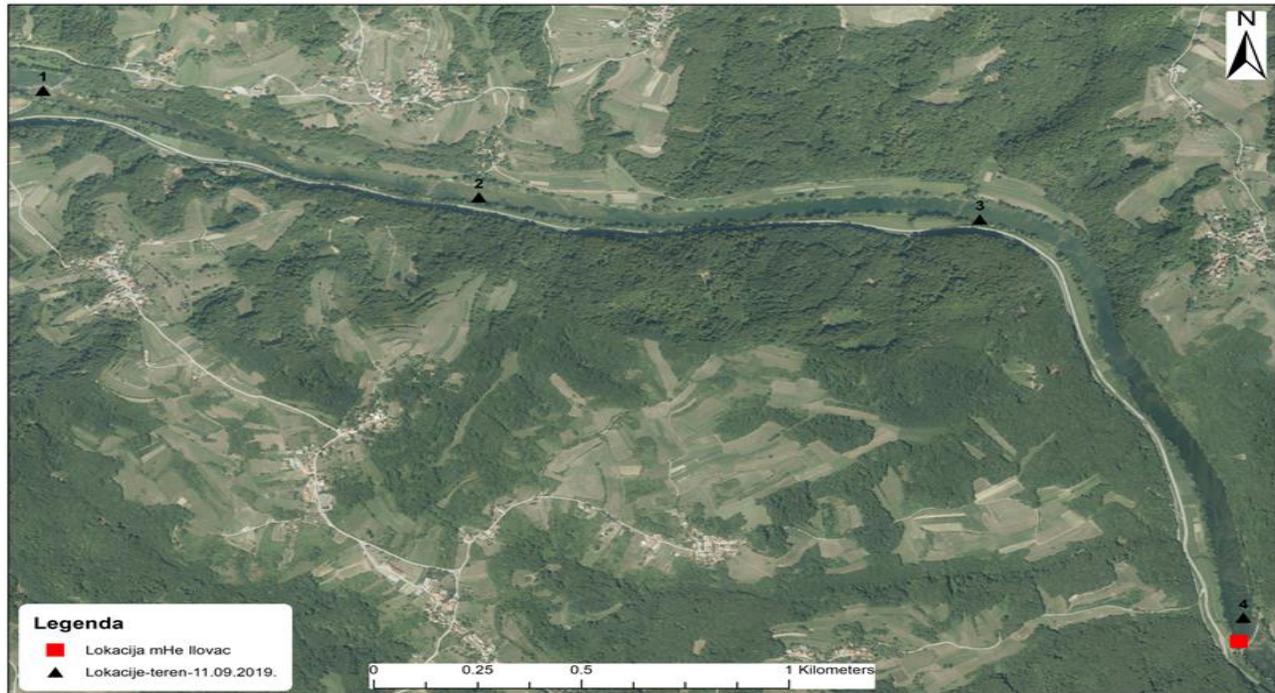


Figure 3: Location of the flooded cascades (two cascades at location 1). The Ilovac small hydropower plant is marked with a red square (source: BIOTA)

What has been lost at these spots is suggested by a BIOTA survey carried out in 2019 at a spot next to the village of Orljakovo, 7 km upstream from the dam. The survey showed a much better ecosystem status compared to the dam location: 16 species in total, and 7 of those species of Community interest. It also identified the presence of the common dace (*Leuciscus leuciscus*) and *Alburnus sava*,³³ a newly assigned species mentioned above that is proposed to replace Pontian shemaya (*Alburnus sarmaticus*) for Croatia on the List of Species of Community interest. It is both rare and endangered. These species thrived under the cascades and in the fast-flowing waters downstream between Orljakovo and the former weir at Ilovac that are now flooded. These habitats have been lost.³⁴



Figure 4: *Alburnus sava* found at the Orljakovo cascade (source: BIOTA)

³³ Bogutskaya, "Description of a new species of *Alburnus* Rafinesque, 1820".

³⁴ BIOTA's assessment is that the habitats are not irreparably lost at the moment. They could be restored if the dam in Ilovac was removed or did not raise the water level upstream and if it had a functional fish pass.

It is entirely unknown whether the dam has influenced the wider Natura 2000 area, in particular given the cumulative impacts with existing and planned dams. This is in particular important for the species such as Danube salmon (*Hucho hucho*) that are locally migratory. Although individuals of Danube salmon were not identified during any of the surveys cited, older data and anecdotal testimonies suggested their presence in the area, and they are known to be present in parts of the Kupa further upstream. The lack of cumulative impact assessment is addressed in the next section of this paper.

Why this happened

Introduction

This section connects what happened in the case of Ilovac with recommendations for the planned EIB policy revision in 2020. Some instances of non-compliance with the Statement and Handbook 2010 are observed, as those policies were applicable to the investment. However, the main aim is to look at the current Handbook and E&S Standards to ensure that the Ilovac case can inform future EIB policy and decision-making. Therefore, the next sections discuss the Ilovac case in the context of policy commitments, assessment, management, monitoring and evaluation and finally stakeholder engagement.

Policy Commitment

Same standards for financial intermediaries and direct investment

The EIB policy claims that for all EIB projects, presumably including those financed by intermediaries, the same standards apply.³⁵ The Bank does this by delegating “*the authority for the financing decision to a financial institution, [...], which has demonstrated the capacity to apply the environmental and social requirements of the Bank, and subject to appropriate reporting, monitoring and contractual requirements. The Handbook describes Bank practices in such cases.*”³⁶ We believe that in this case, HBOR’s capacity to carry out environmental assessments as well as stakeholder engagement was not well assessed (see below).

The Statement states that the issues of reporting, monitoring and contractual requirements are to be set by the Handbook. However, there is evidence that Handbook requirements, in particular those on information disclosure, are not being transposed directly into financing contracts.³⁷ Therefore, some general requirements and EIB commitments on information disclosure must be included in the revised Statement.

BOX: HBOR as a champion of opacity

HBOR received over EUR 2.5 billion³⁸ from the EIB in the 2010-2019 period, which is 54 percent of what Croatia received in total during this time.³⁹ However, the bank is notorious for rejecting any attempt by the public to reveal the projects it finances.

HBOR initiated lawsuits against the Croatian Information Commissioner 24 times in the period 2015-2019 in relation to requests to reveal its beneficiaries.⁴⁰ These lawsuits aimed to overturn the Commissioner’s decisions requiring HBOR to disclose

³⁵ European Investment Bank, *The EIB Statement of Environmental and Social Principles and Standards*, 2009, Article 17, 8, https://www.eib.org/attachments/strategies/eib_statement_esps_en.pdf.

³⁶ European Investment Bank, *The EIB Statement of Environmental and Social Principles and Standards*, Article 16, 8.

³⁷ Complaint on EIB Intermediated Lending to Hydropower Plants in the Balkans (SG/G/2019/01) (submitted January 2019, closed October 2019).

³⁸ European Investment Bank, “Financed Projects”, (Croatia, 2010-2019), last accessed 17 February, 2020, <https://www.eib.org/en/projects/loans/index.htm?q=&sortColumn=loanParts.loanPartStatus.statusDate&sortDir=desc&pageNumber=0&itemPerPage=25&pageable=true&language=EN&defaultLanguage=EN&loanPartYearFrom=2010&loanPartYearTo=2019&orCountries.region=true&countries=HR&orCountries=true&orSectors=true>.

³⁹ Ibid.

⁴⁰ Povjerenik za Informacije, Republika Hrvatska, “Tražilica Odluka i Mišljenje”, last accessed 17 February 2020, <https://tom.pristupinfo.hr/pregludsud.php>.

information. These came as a result of requests to the Commissioner from citizens or civic groups asking for help in obtaining information, including data about beneficiaries of HBOR loans.⁴¹

This practice should have come to an end with the October 2018 decision of the Supreme Court of Croatia⁴² that rejected a motion brought by the Office of the State Attorney (DORH), on behalf of HBOR, requesting the review of the legality of the High Administrative Court's rulings pertaining to citizens' requests for information. The decision confirmed the right of citizens "to exercise control over the holders of power and over the spending of public funds", while this right "includes the transparency of the work of a state-owned bank" which carries out its activities and operations "in accordance with state aid regulations" and is "ultimately financed by citizens and legal entities."⁴³

However, HBOR still rejects information requests on the grounds of banking secrecy, including the request for environmental information that was sent for the purpose of this case study. Another example is the recent request sent by environmental organization Green Istria about HBOR's export credit projects provided in the period 2015-2018 that was rejected by HBOR. The Commissioner overturned that decision in December 2019.⁴⁴ Yet, HBOR is again taking the case to the High Administrative Court, in a war of attrition with the public to keep information about its loans secret.

From the point of view of the public, over half of the money that the EIB lent to Croatia between 2010 and 2019 went into a black hole, since the information about final beneficiaries has been hidden.

No net biodiversity loss

"No net loss" is embedded as a goal in the EU Biodiversity Strategy. As such, this principle is also integrated into the Statement and E&S Standards. For instance, EIB Standard 6 notes that "[u]nderpinning the Biodiversity and Ecosystem Standard of the EIB is the overall goal of maintaining the integrity of areas important for biodiversity as well as the natural functions, processes, and resilience of ecosystems, with the aim of achieving no net loss or a net gain of biodiversity and ecosystem."⁴⁵ Although "no net loss" is often connected to biodiversity offsetting or compensation, the EIB follows the mitigation hierarchy "avoid, minimise, restore and as a last resort compensate for adverse impacts."⁴⁶ Given what was described in the section above on impacts, it seems that the EIB failed to fulfil this commitment in financing the Ilovac hydropower plant.

Assessment

Cumulative Impact Assessment

There is no proof that Ilovac was ever assessed in any other way than as an isolated project before it was built. Its EIA mentions the old existing Ozalj small hydropower plant that is located downstream, but only indicates that the Ilovac plant would not affect the inflow of the Ozalj plant,⁴⁷ rather than analysing the plants' cumulative impact on biodiversity. There is no mention of the

⁴¹ Slavica Lukić, "State-run HBOR bank constantly suing Information Commissioner to keep recipients of its loans secret", *Jutarnji List*, 17 October 2018, <https://euractiv.jutamji.hr/en/energy-and-economy/finances/state-run-hbor-bank-constantly-suing-information-commissioner-to-keep-recipients-of-its-loans-secret/7952815/>.

⁴² Republic of Croatia Supreme Court, Rješenje U-zpž 6/2016-7 [Decision U-zpž 6/2016-7], 17 October, 2018, <https://drive.google.com/file/d/1HQ7RLWzfhTZKBR6pE9HccaJePx0MuK8/view>.

⁴³ Mickov, Dunja and Radojčić, Dušica, "Just can't get enough judgements: Croatian export bank still firmly riding the waves of opacity", *Bankwatch*, 30 January, 2020, <https://bankwatch.org/blog/just-can-t-get-enough-judgements-croatian-export-bank-still-firmly-riding-the-waves-of-opacity>.

⁴⁴ Republic of Croatia, Povjerenik za Informacije, Rješenje UP/II-008-07/19-01/436 [Decision UP/II-008-07/19-01/436], 6 December 2020, <https://tom.pristupinfo.hr/pregledfilter1.php?izb=2142>.

⁴⁵ European Investment Bank, *Environmental and Social Standards*, 2018, 26, https://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en.pdf.

⁴⁶ European Investment Bank, *Environmental and Social Standards*, 27.

⁴⁷ Elektroprojekt, "MHE na području Karlovačke županije: MHE Ilovac" ["EIA for the Ilovac small hydropower plant"], 116.

cumulative impact with the other plants listed in the 2008 update of the Spatial Plan of Karlovac county.⁴⁸ According to the local NGO Eko Pan, the 2008 Spatial Plan did not undergo a Strategic Environmental Impact Assessment (SEA) procedure,⁴⁹ although the Environmental Protection Act (adopted in 2007) at the time prescribed SEAs for county-level spatial plans.⁵⁰

The most obvious omission is that there was no mention of the Brodarci small hydropower plant, that is planned further downstream from Ozalj. The section on cumulative impacts in the Appropriate Assessment for the Brodarci project – also promoted by Tekonet d.o.o. – mentions a 50 per cent loss of biodiversity if all the planned plants are built and the impact of the city of Karlovac is counted in,⁵¹ suggesting that cumulative impacts should also have been subject to an in-depth assessment for Ilovac.

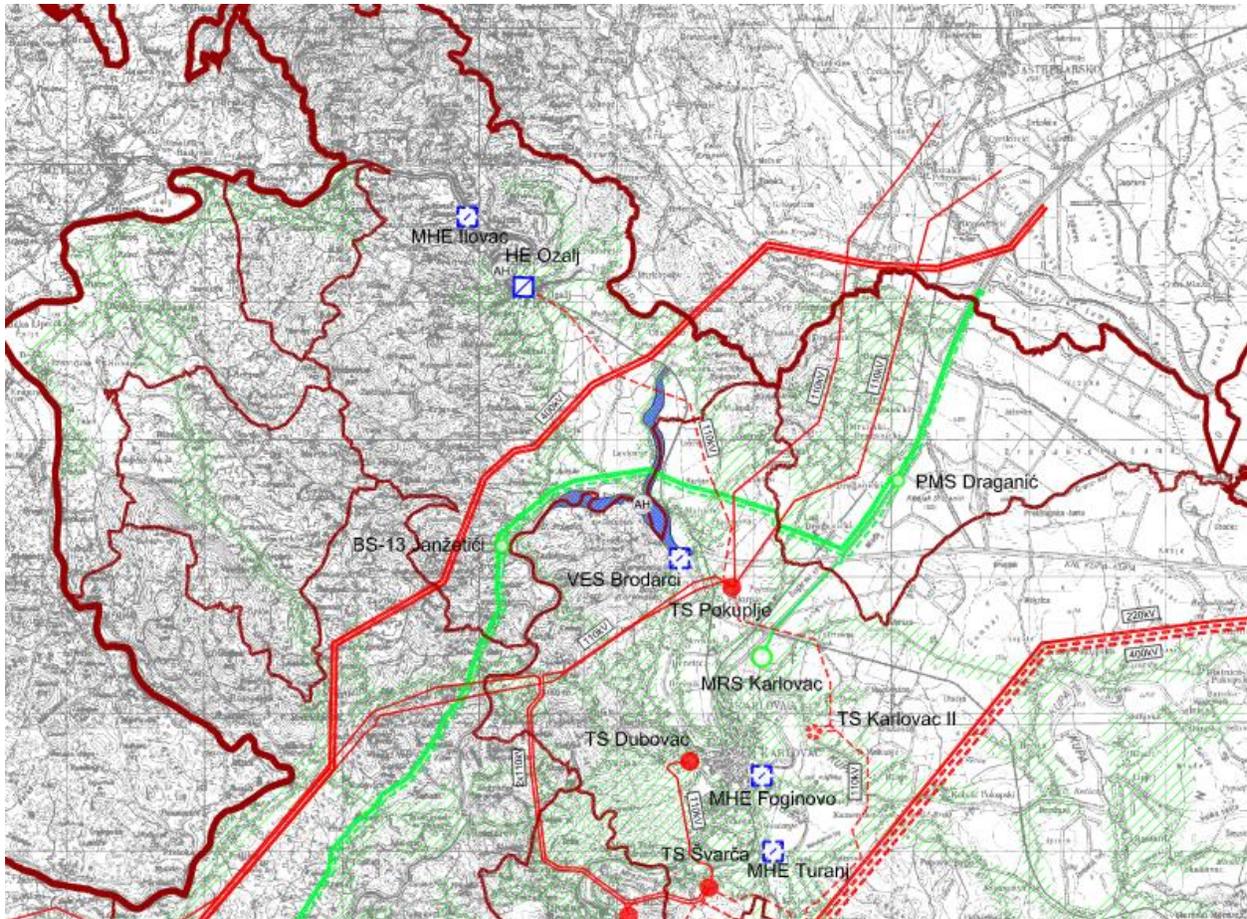


Figure 5: The blue squares mark the planned and existing hydropower plants downstream from Ilovac. The Fuginovo and Turanj small hydropower plants (MHE) were not planned on the river Kupa but on its tributary, the Korana. (Source: Spatial Plan of Karlovac County, 2008)

⁴⁸ *Prostorni Plan Karlovačke Zupanije [Updated Spatial Plan of Karlovac County]*, Urbanistički Zavod Grada Zagreba, 2008, 36, <https://www.kazup.hr/images/dokumenti/Tekst-PPKZ-izmjene-i-dopune.pdf>.

⁴⁹ Eko Pan, “Ministarstvo usvojilo žalbu Eko Pana i poništilo rješenje Karlovačke županije za MHE Barilović”, *Eko Pan*, 4 March, 2014, <http://ekopan.hr/blog/ministarstvo-usvojilo-zalbu-eko-pana-i-ponistilo-rjesenje-karlovačke-zupanije-za-mhe-barilovic/>.

⁵⁰ Republic of Croatia, Zakon o zaštiti okoliša, Article 56, 10 October, 2007, <http://www.ant.hr/zakon-o-zastiti-okolisa.html>.

⁵¹ IRES, *Studija za Glavnu ocjenu prihvatljivosti zahvata za ekološku mrežu MHE Brodarci [Appropriate Assessment for the Brodarci small hydropower plant]*, February, 2013, 67, https://drive.google.com/file/d/12A0LnYQoi-6QlHqQLXSxO_0HkEjaQfz/view.

In response to a request to the EIB on whether the appraisal process included any strategic or basin-level study, the EIB clarified⁵² that: “[i]n line with the Bank’s procedures applicable at the time for intermediated loans for SMEs and Mid-caps, and on the basis of the size of this particular allocation, the project was not referred back to the EIB and therefore, the EIB did not appraise the environmental and social aspects of the Ilovac small hydropower plant.” In response to a request with the same content, HBOR refused to answer, citing banking secrecy.⁵³

The requirement to assess cumulative impacts is embedded in several EIB policies. Article 19 of the 2009 Statement notes that the environmental assessment “required by the EIB should relate to the entire project and its sphere of influence, not just to the part that is being financed by the Bank. Such an assessment should encompass the cumulative direct and indirect impacts of the project.”⁵⁴ We assess the lack of appraisal of cumulative and basin-wide impacts of Ilovac as a failure in applying the policy.

The most updated version of the E&S Standards (2018), that came into force after Ilovac was put into operation, states that the “[c]umulative impacts of the project should be appropriately assessed:

- a) Between the different elements of the projects (no ‘salami-slicing’ of impacts);
- b) With regards to other projects in the same area likely to have similar impacts; and,
- c) With regards to other activities, threats and pressures in the wider landscape, that might have similar or related impacts on biodiversity and ecosystems.”⁵⁵

This already looks like a more specific requirement that would trigger the rejection of any future projects with an EIA quality similar to that of Ilovac. However, there is still space to improve the policy, and not only its implementation, in this regard to avoid future cases like Ilovac. The new EIB Hydropower Guidelines rightly put an emphasis on the importance of a strategic approach to hydropower development.⁵⁶ This should be further detailed in the Statement, while the Handbook should have detailed instructions about quality control of strategic studies, in order to avoid acceptance of sub-standard assessments, in particular outside of the EU.

Area of influence

Apart from its wider impact, the EIA for Ilovac misdescribed the area of influence of the project itself. The environmental permitting documents consistently downplayed the impacts of the impoundment, based on the expectation that the ROR design would not create a reservoir.⁵⁷ The EIA claims that at the very border of the area of influence (500-750 m away from the border with Slovenia)⁵⁸ the increase of water level would not be more than 2 cm. The EIA mentions that at the dam location, the average water level rise would be around 2 m.⁵⁹

⁵² EIB, email to the author, 29 November, 2019.

⁵³ HBOR, Decision 36/2019, 9 January, 2020, https://drive.google.com/file/d/1-4jcnRWou7TUW_K79jZ_JdojjeBMmVx/view.

⁵⁴ European Investment Bank, *The EIB Statement of Environmental and Social Principles and Standards, Preamble*, 13.

⁵⁵ European Investment Bank, *Environmental and Social Standards*, 32.

⁵⁶ European Investment Bank, *Environmental, Climate and Social Guidelines on Hydropower Development*, October 2019, 7, <https://www.eib.org/en/publications/environmental-climate-and-social-guidelines-on-hydropower-development>.

⁵⁷ Elektroprojekt, “MHE na području Karlovačke županije: MHE Ilovac” [EIA for the Ilovac small hydropower plant], 116. For the effects of the water levels raised by ROR schemes — of the so called “weir pond” on the river ecology see Anderson, David, Helen Moggridge, Philip Warren, and James Shucksmith, “The impacts of ‘run-of-river’ hydropower on the physical and ecological condition of rivers”, *Water and Environment Journal* 29 (June 2015): 268-276, <http://doi.org/10.1111/wej.12101>.

⁵⁸ The edge of the area of influence was moved to 750 m from the border with Slovenia by the design changes approved in 2011.

⁵⁹ Elektroprojekt, “MHE na području Karlovačke županije: MHE Ilovac” [EIA for the Ilovac small hydropower plant], 122.

This is contradicted by the field observations by the BIOTA team. The most upstream cascade, near the village of Obrež-Vivodinski, is at the limit of the area of impoundment. The cascade was flooded during a visit on 3 July 2019, while it was visible during a visit on 11 September 2019, when the hydropower plant was not in operation, which reduced the water level by approximately 0.5 m and uncovered the flooded cascade.⁶⁰ This would not be the case if indeed the impact of the dam at this location was as described in the EIA.

Flooding the rapids in the river contradicts the conditions stipulated in the environmental permit, where exceptional care was prescribed in maintaining low water level oscillations, particularly in the spring period.⁶¹ This is important because the cascade was a potential habitat of Species of Community interest such as *Alburnus sarmaticus* (proposed to be defined as *Alburnus sava* within Croatia, as already mentioned above).



Figure 6: Flooded cascade next to Obrež Vivodinski and same cascade, uncovered, on the right, while the Ilovac dam was not operating, three months later (source: BIOTA)

Even under assumption that the area of influence is 4 km upstream from the dam, as was claimed by the EIA, it seems that the area of assessment was also not correctly determined. No field surveys of aquatic species were done in the section of Kupa upstream of the weir. This seems like a clear violation of EIB E&S Standards and can potentially be avoided in future if all hydropower projects done through financial intermediaries are referred back to the Bank, no matter the size and design.

⁶⁰ Vucić and Jelić, *Istraživanje ihtiofaune rijeke Kupe na području mHe „Ilovac“*, 31.

⁶¹ Ministry of Environmental Protection, Physical Planning and Construction, Rješenje 531-14-1-1-18-10-16 [Decision 531-14-1-1-18-10-16], 2.

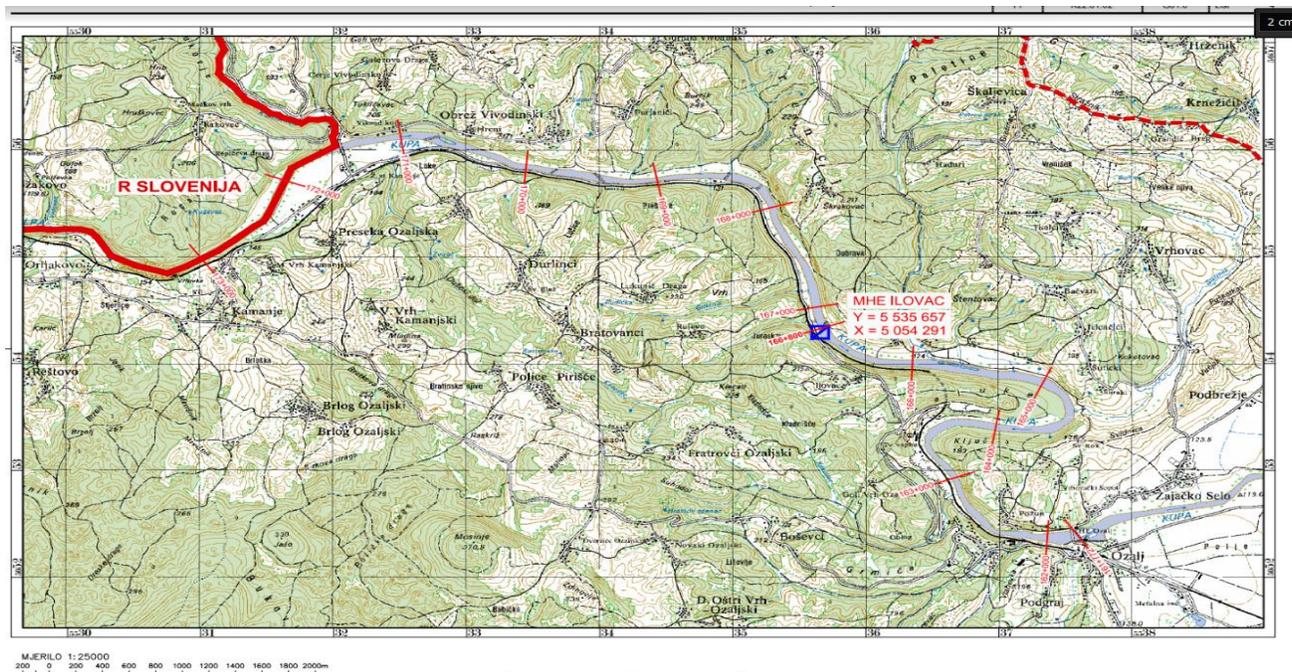


Figure 7. Location of the Ilovac plant and the area of influence (source: EIA)

Gap analysis

Gap analysis is a standard element of the EIB appraisal process and compares the relevant national legislation and standards with the EU, EIB and applicable international framework. It is one of the first steps in the comprehensive ESIA procedure.⁶² It is not clear whether a gap analysis was done for this project.⁶³ The environmental permitting for this project was finalised in 2010-2011, while the loan appraisal started in late 2012 at the earliest, and was probably signed after January 2013 when Croatia joined the EU.

The European Commission's progress report on Croatia's Accession from 2010 when the EIA for Ilovac was approved⁶⁴ indicates that although there is some progress "with the adoption of implementing legislation on nature impact assessments [...] [g]aps remain in the administrative capacity for implementing and enforcing the *acquis*." Also the report concludes that "[i]mplementation of the horizontal *acquis*, most notably on EIA, SEA and access to information [...] needs to be improved."⁶⁵

The final monitoring report published in October 2012, although accession was imminent, still stated that "[f]urther efforts are needed to implement the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). In particular, the quality of environmental impact studies as well as the quality check mechanisms need to be significantly improved."⁶⁶

Article 18 of the 2009 EIB Statement prescribes that "[t]he environmental and social standards apply without qualification in the EU. Within the EU, EU law is mandatory, but the Bank reserves the right to set its own higher standards should this be considered

⁶² European Investment Bank, *Environmental and Social Standards*, 14.

⁶³ See more detailed information in the section on Stakeholder engagement

⁶⁴ European Commission, "Croatia 2010 Progress Report Accompanying the Communication From the Commission to The European Parliament and The Council Enlargement Strategy and Main Challenges 2010-2011", 9 November, 2010, 50, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/pdf/key_documents/2010/package/hr_rapport_2010_en.pdf.

⁶⁵ European Commission, "Croatia 2010 Progress Report", 60.

⁶⁶ European Commission, "Comprehensive Monitoring Report on Croatia's state of preparedness for EU membership", 10 October, 2012, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/pdf/key_documents/2012/package/hr_analytical_2012_en.pdf.

*appropriate. The same standards also shall be pursued in the Candidate and Potential Candidate Countries.*⁶⁷ However, it seems that Croatia, which was shifting from being a Candidate to a fully-fledged EU Member State at the time of the loan appraisal, was not implementing or enforcing EU legislation in a satisfactory manner according to the EC.

If the gap analysis had been done in line with the current EIB policy framework, it would probably have triggered a requirement for additional studies to be done in order to align the environmental permitting of the Ilovac plant with EU and EIB standards. However, stronger language is needed in the new policy to:

- (1) expand the gap analysis to implementation of EU legislation in Candidate countries, but also in EU countries, because it cannot be taken for granted that legislation is correctly applied.
- (2) require clear practical steps and additional studies to close the gap.

The competent national authorities are not to be trusted if there is an obvious lack of capacity to assess the quality of environmental studies. In addition, the discrepancies between the “*same standards apply for all investments*” principle from the Statement and the “*national legislation applies*” rule of thumb used in the Handbook for intermediated loans⁶⁸ must be removed in the revised policy.

Appropriate Assessment

The Appropriate Assessment tool derives from the Habitats Directive to ensure that the potential adverse effects of a plan or project that is located in a Natura 2000 site are checked and prevented. Since the permitting for Ilovac was done a few years prior to EU accession, an equivalent of the Appropriate Assessment (AA)⁶⁹ was conducted and included in the EIA that was approved in 2010. Unfortunately, the quality of the AA was questionable and some of the issues already mentioned contributed to this.

Firstly, the apparent lack of biodiversity survey done beyond the project site means that there is no information on any impacts on the integrity of the protected area or connectivity with other sites that are in the vicinity. This is particularly important when it comes to HR2000586 Žumberak Samoborsko gorje, which was established to protect some of the habitats of riparian and aquatic species such as the Balkan goldfish (*Cordulegaster heros*) or yellow-bellied toad (*Bombina variegata*). Although some of these features of adjacent areas are mentioned, the lack of a more comprehensive survey failed to establish a good basis to exclude the possibility of impacts on them.

Also, although migratory species such as Danube salmon (*Hucho hucho*) in the Kupa are mentioned, the conclusion that the dam would not endanger their migratory route was reached on the basis of a survey done in July and September of 2009. More effort was necessary, for instance, repeating the survey in the winter season or the following year to make sure that *Hucho hucho* was really not present at the dam’s site. Even if the impacts had still been assessed as manageable, the presence of Danube salmon might have required different mitigation measures.

⁶⁷ European Commission, “Comprehensive Monitoring Report on Croatia’s state of preparedness for EU membership”, 8.

⁶⁸ In the current version of the *Environmental and Social Practices and Procedures* (2013), Article 139, page 154, it is noted that “*All projects financed through financial intermediaries are covenanted to comply with appropriate environmental and social legislation; within the EU, EU legislation, outside the EU, national legislation, with reference where appropriate to alignment with EU legislation and EIB environmental and social standards.*”

⁶⁹ Done in line with the then current laws and regulations: Narodne Novine, “Zakon o zaštiti prirode”, June, 2005, https://narodne-novine.nn.hr/clanci/sluzbeni/2005_06_70_1370.html; Propisi, “Pravilnik o Ocjeni Prihvatljivosti Zahvata za Prirodu”, last accessed on 17 February 2020, <http://www.propisi.hr/print.php?id=6775>.

Secondly, it seems that apart from the fish survey, no other surveys were done in the context of the EIA. The EIA mentions⁷⁰ a baseline study that includes aquatic and terrestrial species⁷¹ but from the text of the EIA, it seems that the terrestrial species survey was done mostly or solely as desk research.⁷²

Finally, diminishing of the impact of the impoundment in the EIA and AA and limiting it to only 0.3 ha around the powerhouse completely ignored the impact on the riparian vegetation and the habitats that were flooded.

The AA is the only part of the EIA that lists in some detail impacts on fish species.⁷³ This assessment evaluates the impact on Danube barbel (*Barbus balcanicus*) at 10 per cent and this species was completely absent in all monitoring surveys done after 2018. This section of the EIA mentions the impact on Danube salmon from cumulative impacts, but does not reach a conclusion about the scale of the impact.

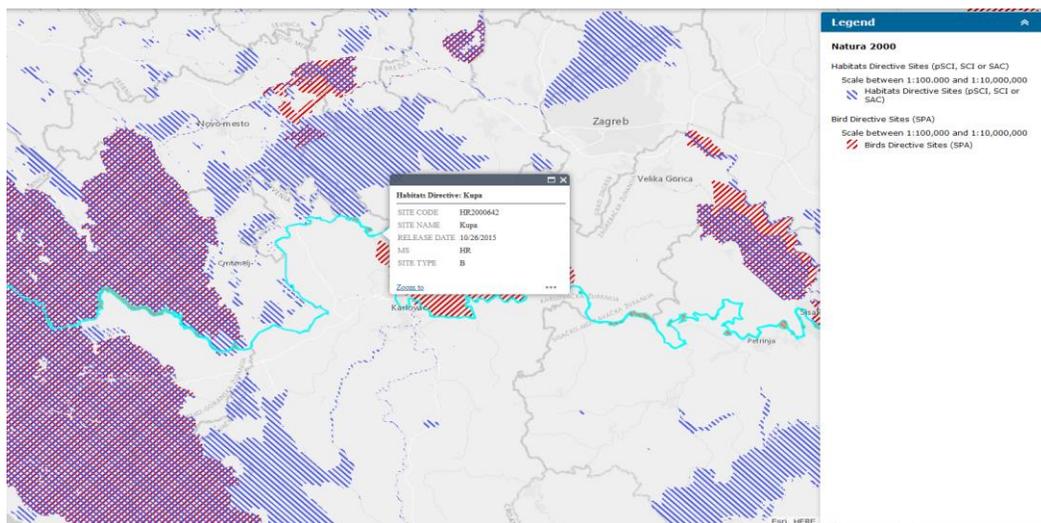


Figure 8: Kupa HR2000642 Natura 2000 site (highlighted in turquoise) in the context of the Natura 2000 network in Croatia and Slovenia - shaded areas (source: EEA [EUNIS](#))

⁷⁰ See EIA, pages 82-83 for the fish survey.

⁷¹ Cited in the EIA as Mrakovčić, M., Mustafić, P., Čaleta, M. (2009.) Značajke ihtiofaune i faune kopna područja MHE Ilovac, ZOOLOGIJSKI ZAVOD, Biološki odsjek, Prirodoslovno-matematički fakultet Sveučilišta u Zagrebu (in Croatian). The document was not available online.

⁷² The EIA mentions that some “basic inventory research” of terrestrial fauna was done as part of the Mrakovčić study cited in footnote 69, as well as a literature review, but it is not clear whether this included any field research. Considering the Mrakovčić study is not available online, this could not be further checked.

⁷³ Elektroprojekt, “MHE na području Karlovačke županije: MHE Ilovac” [EIA for the Ilovac small hydropower plant], 138.

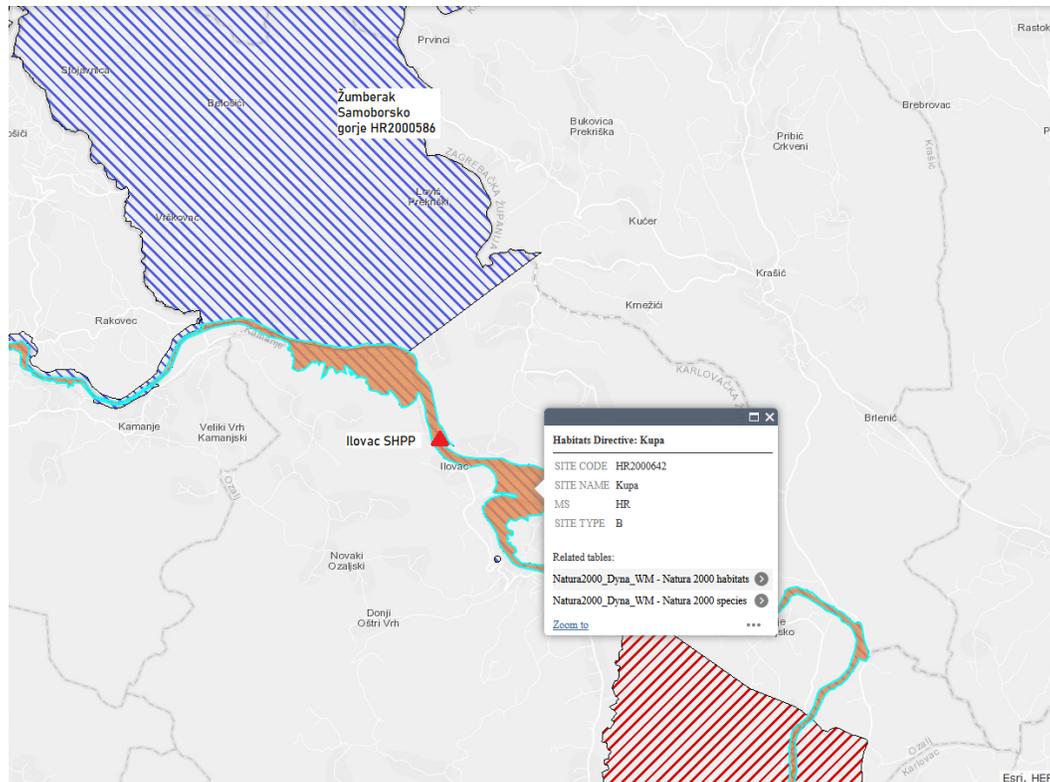


Figure 9: Close-up of the project site (source: EEA [EUNIS](#), modified)

To our knowledge, the Appropriate Assessment was not supplemented or repeated, notwithstanding the issues mentioned in the previous section about the state of implementation of the EU environmental acquis in Croatia in 2010 and 2012.

Apart from being a (proposed) Natura 2000 site, the Ilovac location fulfilled the criteria for designation as a *critical habitat* according to at least two criteria from the EIB 2009 Statement:⁷⁴

- (1) presence of critically endangered, endangered or vulnerable species as defined by the IUCN Red List and
- (2) required for the survival of migratory species or congregatory species.

On the first criteria, the competent national authorities reported the following species when proclaiming the Kupa HR2000642 site:

- thick-shelled river mussel - *Unio crassus* (vulnerable),⁷⁵
- scarce fritillary - *Hypodryas maturna*⁷⁶ (vulnerable),
- stone crayfish - *Austropotamobius torrentium*⁷⁷ (not evaluated by the IUCN, but with unfavourable-bad EU conservation status),
- Danube salmon - *Hucho hucho*⁷⁸ (endangered) and
- *Alburnus sarmaticus* (endangered; three out of an EU-wide total of four Natura 2000 sites designated for its protection are situated in Croatia).⁷⁹

⁷⁴ European Investment Bank, *The EIB Statement of Environmental and Social Principles and Standards*, 27.

⁷⁵ European Environment Agency, “*Unio crassus* Phillipsson, 1788”, last accessed 17 February 2020, <https://eunis.eea.europa.eu/species/361>.

⁷⁶ European Environment Agency, “Scarce Fritillary - *Hypodryas maturna* (Linnaeus, 1758)”, last accessed 17 February 2020, <https://eunis.eea.europa.eu/species/193>.

⁷⁷ European Environment Agency, “*Austropotamobius torrentium* (Schrank, 1803)”, last accessed 17 February 2020, <https://eunis.eea.europa.eu/species/44>.

⁷⁸ European Environment Agency, “Danube - *Hucho hucho* (Linnaeus, 1758)”, last accessed 17 February 2020, <https://eunis.eea.europa.eu/species/514>.

⁷⁹ European Environment Agency, “*Alburnus sarmaticus* Freyhof & Kottelat, 2007”, last accessed 17 February 2020, <https://eunis.eea.europa.eu/species/318940>.

The first three species are invertebrates that were not part of the field research that formed the baseline for the EIA. On the second criteria, the burden of proof was on the promoter to show that the stretch influenced by the project would not endanger the survival of migratory species such as *Hucho hucho*.⁸⁰

Although it seems that in this case there was a failure in implementation of the EIB Standards related to Natura 2000 sites and critical habitats, there are also lessons to be drawn for strengthening the policy. In particular for investments outside of the EU, the new EIB Handbook needs to include stronger provisions for critical habitats, and Financial Intermediaries should not be allowed to finance projects in Natura 2000 sites or critical habitats at all.

Management

Fish pass

It is highly likely that the fish pass on the Ilovac dam is non-functional. It was prescribed as one of the mitigation measures in the Environmental Permit issued in 2010, to ensure upstream migration of Common nase (*Chondrostoma nasus*).⁸¹ However, the fish pass was dry during some monitoring visits and flooded during others, both during the surveys commissioned by the dam operator to the University of Zagreb and those conducted by BIOTA.

Moreover, the University of Zagreb researchers assessed the fish pass as faulty by design. According to them, the project promoter did not follow the design that was prescribed in the EIA, but made assumptions based on experience, not on an actual survey. The fish pass is not part of the monitoring required by the Ministry of Environment and its monitoring was even assessed as too expensive.⁸²

The University researchers engaged by the operator still claim that the dam itself is passable for fish, since water levels in Spring usually ensure enough water flowing over the dam, attracting the fish to swim upstream.⁸³

Fish passes are not covered separately in the EIB Statement or E&S Standards, since they are a very specific mitigation measure. Requirement 22 of the Hydropower Guidelines mentions a fish pass as a minimum mitigation measure. In the 2009 Statement it is noted that “[w]here [...] a project has significant negative environmental and/or social impacts, by virtue of its size, nature or location, alternatives should be considered and appropriate mitigation and/or compensation measures identified.”⁸⁴ The E&S Standards (2018) place an emphasis on environmental and social management plans (ESMPs) that “will describe the mitigation of environmental and social impacts and risks, the performance improvement as well as the opportunities.”

Neither the details of the final beneficiary’s ESMPs nor those of HBOR are publicly available, while the management and monitoring requirements are listed in the Environmental Permit (2010) for Ilovac with no clause requiring testing of the fish pass.

Our conclusion from this and from field missions at other locations⁸⁵ is that fish passes are often gimmicks to green-wash hydropower projects, rather than a genuine mitigation measure, particularly as we are not aware of any case in southeast Europe where the functionality of a fish pass has been tested. The requirement that the costs of all measures, including the mitigation

⁸⁰ European Investment Bank, *Environmental and Social Standards*, 28.

⁸¹ Ministry of Environmental Protection, Physical Planning and Construction, Rješenje 531-14-1-1-18-10-16 [Decision 531-14-1-1-18-10-16].

⁸² Mrakovčić and Marčić, “Monitoring i ispitivanje riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja”, 22-24.

⁸³ Mrakovčić and Marčić, “Monitoring i ispitivanje riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja”, 22.

⁸⁴ Article 16, p. 22

⁸⁵ For both EIB- and non-EIB-financed plants. For EIB-financed plants, see the case studies of the Kamena reka and Tearce 97-99 projects in North Macedonia in *Broken rivers: The impacts of European-financed small hydropower plants on pristine Balkan landscapes*, Bankwatch, 19 December, 2017, <https://bankwatch.org/publication/broken-rivers-impacts-european-financed-small-hydropower-plants-pristine-balkan-landscapes>.

measures, are included in the ESMP is already in the EIB E&S Standards,⁸⁶ so more supervision of clients and intermediaries is needed rather than a change in the Standards.

Monitoring and evaluation

Monitoring of the fish population and water quality was required by the environmental permit issued in November 2010. The monitoring was supposed to happen annually in the winter period. According to information provided by the Ministry of Environment and Energy of the Republic of Croatia to WWF Adria on request,⁸⁷ monitoring was conducted only in 2017 and 2018. It is not clear if the monitoring continued in 2019, although one of the recommendations of the 2018 report was to conduct surveys twice a year.⁸⁸

Although the dam has been operating since 2015, the first monitoring visit happened on 24 May 2017⁸⁹ and the second on 8 June 2018.⁹⁰ It is not clear why the Ministry did not follow the instruction from the permit to conduct monitoring in the winter months, although it is also not clear why monitoring was scheduled in the winter months in the first place. One reason could be that this is the usual spawning period for salmonid fish species, but this is not noted in the permit itself. The power plant was not working during either of the visits, and the rubber part of the dam was deflated, raising questions whether the surveys reflect a typical state of affairs.

According to the authors of the 2018 monitoring report, one more informal visit was made in March 2018, when the dam was operating, and at this time the team observed that even with very high water levels (6 m more than in June), the fish pass was not working properly, as the turbulence and water velocity were too high.

The timing of the monitoring visits also raises doubts about whether the team's assessment that the habitats remained typical of fast moving water is correct, since the effect of slowing down the waters is more observable when the dam is up and operating. This is important because both the environmental permit and the guidelines for the protection of habitats and wild taxa in the Kupa HR2000642 site prescribe the preservation of rapids in the river Kupa.⁹¹

EIB policy puts the responsibility for monitoring onto clients⁹² while reserving the right to check any project for compliance. In the case of Ilovac it seems that the EIB's check may have been prompted by engagement with civil society organisations as described in the section below, but it appears that it did not go deeper than checking the formalities of the permitting process and monitoring schedule.

For hydropower plants, the EIB might want to start to require public and real time disclosure of environmental parameters such as residual flow, water levels in the reservoir, CCTV streaming showing the fish pass, suspended particulate matter above and below the dam and so on. These solutions could be required in the Statement and Handbook, and then developed in more detail in sector-specific guidelines. More traditional monitoring surveys must be properly budgeted so that they are adequately conducted at proper intervals.

⁸⁶ See the definition of ESMP on page 4 of the *Environmental and Social Standards* (2018).

⁸⁷ Email from the Ministry on 15 January 2020.

⁸⁸ Mrakovčić and Marčić, "Monitoring i ispitivanje riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja", 24.

⁸⁹ Mrakovčić, Zanella, and Marčić, "Praćenje faune riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja".

⁹⁰ Mrakovčić and Marčić, "Monitoring i ispitivanje riba rijeke Kupe (mHE Ilovac) kod pregrade Zaluka iznad Ozlja".

⁹¹ Ministry of Environmental Protection, Physical Planning and Construction, Rješenje 531-14-1-1-18-10-16 [Decision 531-14-1-1-18-10-16], 3; Elektroprojekt, "MHE na području Karlovačke županije: MHE Ilovac" [EIA for the Ilovac small hydropower plant], 147.

⁹² European Investment Bank, *The EIB Statement of Environmental and Social Principles and Standards*, Article 8, 11.

Stakeholder engagement

There have been two main features of the stakeholder engagement from the financial institutions involved - the EIB and HBOR. The EIB has consistently tried to pass responsibility for the environmental performance of this project to HBOR and the competent national authorities. HBOR, meanwhile, has insisted that all the information requested from it is subject to banking secrecy rules.

Civil society organisations attempted to engage with the EIB regarding the Ilovac case, once it was clear that the project was financed with the EIB money. This was revealed only in 2016, after repeated attempts by CEE Bankwatch Network to identify hydropower projects in southeast Europe financed via EIB credit lines. Out of over 20 projects,⁹³ the only plants whose names were disclosed by the EIB were Ilovac and four other hydropower plants in North Macedonia.⁹⁴ These were revealed in response to a question asking which projects had been subject to EIAs, which means that for the other 17 there was no EIA done.⁹⁵ The projects were disclosed via email, but the Non-Technical Summary for Ilovac was additionally published on the EIB's website.⁹⁶

Bankwatch investigated all five projects and their described impacts in its "Broken Rivers" report, published in late 2017. In response, in March 2018, the EIB only confirmed that the EIA for Ilovac was approved and that it includes a requirement for regular monitoring.

In November 2019, Bankwatch requested further information about due diligence of the project, in particular related to the gap analysis between EU and Croatian legislation, Appropriate Assessment (AA), public availability of a comprehensive EIA⁹⁷ and finally, monitoring.

The EIB's response was that "*the project was not referred back to the EIB and therefore, the EIB did not appraise the environmental and social aspects of the Ilovac small hydropower plant*" and that therefore "*the Bank does not hold the information requested.*" It also claimed that "*the information on individual allocations...falls within the competence of the intermediary bank as part of the normal business relationship between the respective bank and its customers.*"⁹⁸

How the intermediaries interpret this relationship, when given a free hand, was obvious once the NGO WWF Adria, based in Zagreb, requested the same information from HBOR in December 2019. In January 2020, HBOR rejected the request, citing banking secrecy.

To our knowledge, no public information was provided by either the EIB or HBOR about their participation in the project, let alone attempts to engage the public in consultation. Although NGOs managed to get the full EIA study as well as monitoring reports from the Ministry of Environment and Energy of the Republic of Croatia in the end, information about the banks' due diligence on this project has remained a mystery.

From the point of view of local experts or communities that might have had grievances with the Ilovac project being financed with EU-EIB public money, communicating those to the financial institutions in a timely manner was "mission impossible".

⁹³ *Financing for hydropower in protected areas in Southeast Europe*, Bankwatch, December, 2015, <https://bankwatch.org/wp-content/uploads/2015/12/SEE-hydropower-financing.pdf>.

⁹⁴ European Investment Bank, email to the author, 4 February 2016.

⁹⁵ It proved that the ones in North Macedonia did not have an EIA either, but the so-called environmental 'elaborat'. See Bankwatch, *Broken rivers: The impacts of European-financed small hydropower plants on pristine Balkan landscapes*.

⁹⁶ iC consulenten Ziviltechniker GesmbH, "English Summary of the Non-Technical Summary of the Environmental Impact Assessment (NTS) prepared by Elektroprojekt D.D.: Ilovac SHPP."

⁹⁷ Only the NTS was available on the website of the EIB.

⁹⁸ European Investment Bank, email to the author, 29 November 2019.

That the project is EIB-financed became clear only in 2016, long after it started operating. It is not even completely clear which EIB policy and which standards apply to this project, although the assumption is that version 2.0 of the Handbook applied, since that was the published version at the time when the loan was extended to HBOR. Finally, even if there is an opportunity to address some of the grievances now that the project is already operating, the local responsible intermediary, HBOR, is rejecting any cooperation with civil society organisations.

There is a need for a major update of the EIB policy in this regard to fix such a vicious circle.

Conclusions & recommendations

There are three main conclusions of this study.

1. The biodiversity baseline was not established for all relevant species and the direct and indirect impacts of the Ilovac project were consequently played down. As well as being a Natura 2000 site, the Ilovac site was potentially a critical habitat.
2. The gap between Croatian standards and EU and EIB standards was not addressed, and the financiers missed the need to commission additional studies to minimise the impacts of the project.
3. The project financiers failed to ensure adequate information and engagement with the public. Even the signature date of the Ilovac sub-project remained a mystery until March 2020, not to mention any details about due diligence. For the public, engagement with the competent national authorities is not sufficient to replace engagement with the financiers, since financiers use complementary but different standards.

Ilovac can be used as a lesson learned for EIB policy and due diligence in non-EU countries, and in particular accession countries, since it was in the pipeline during Croatia's EU accession.

Recommendations for the revision of the EIB's E&S policies

- The EIB's policy commitments on biodiversity need to be the same in EU and non-EU countries. This needs to be clearly spelled out in the new Statement and E&S Standards, with no derogations allowed. Where non-EU countries lack legislation such as on Natura 2000, equivalent protection must be ensured, such as via critical habitat requirements.
- The Statement and E&S Standards must take into account a strategic approach to infrastructure development and condition project financing on good quality strategic-level studies and documents such as Strategic Environmental Assessments and River Basin Management Plans adequately incorporating the project being appraised.
- More attention must be paid to the cumulative assessment element of EIA studies.
- The Statement must be clear on requirements for project level information disclosure and due diligence of intermediated investments. Only procedural details should be relegated to the Handbook.
- The Statement must contain stricter requirements on critical habitats. Financial intermediaries must not be allowed to finance projects in Natura 2000 sites or critical habitats.
- The new Standard on Financial Intermediaries must require referral of high-risk projects to the EIB. The type of projects that are deemed high-risk should be published as an annex. The list must by default include Annex I projects from the EIA Directive, but also hydropower projects— no matter the size or design — need to be on this list.

- The new Statement and Transparency Policy must contain a commitment by the EIB to publish a Non-Technical Summary (NTS) of each project that is on the referral list, prior to the signing of the financing contract with the final beneficiary.
- The new Standard on Financial Intermediaries must require the Financial Intermediary to publish all environmental information as defined by the Aarhus convention - not just EIA studies - on its website prior to the signing of the financing contract with the final beneficiary. The link to the grievance mechanism of the Financial Intermediary and EIB's Complaint Mechanism must be displayed.

Recommendations on the implementation of the EIB's E&S policies

- The implementation of the same standards for EU and non-EU countries needs to be operationalised in the EIB's E&S Practices and Procedures, including specific guidelines for EIB staff on adequate equivalents of EU legal procedures, eg. Appropriate Assessment, Water Framework Directive Article 4, River Basin Management Plans etc.
- The disclosure requirements mentioned above must be operationalised in the E&S Practices and Procedures by ensuring that Financial Intermediaries secure the consent of the final beneficiary for disclosure as a condition of loan disbursement.
- The EIB must introduce a tailored approach to EU countries that are lagging behind in applying EU legislation such as the Water Framework Directive and Nature Directives. The presumption that EU law is correctly transposed should not be extended to an assumption of correct implementation. The Gap Analysis should include an assessment of the correct implementation of EU law in the target country. If a gap is identified, the Handbook should require an additional quality check of the project studies.
- The EIB must include the full costs of appropriate mitigation measures in its analysis of environmental costs and benefits of projects.
- The EIB needs to do regular project-level monitoring of intermediated investments that are deemed high-risk. Such monitoring requirements should be spelled out in the E&S Practices and Procedures and in contracts with financial intermediaries.
- For hydropower projects, the EIB must require public and real-time disclosure of environmental parameters such as residual flow, water levels in the reservoir, CCTV streaming showing the fish pass, suspended particulate matter above and below the dam and so on.

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