



POLICY GUIDELINES

by the Energy Community Secretariat

on small hydropower projects in the Energy Community

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1. Purpose

This document provides general guidance for environmental assessments (environmental impact assessments at project level and strategic environmental assessments at plan/programme level) applicable to the administrative and permitting procedures of new hydropower projects in the Contracting Parties. Furthermore, it reflects on the support schemes that may qualify as State aid and must therefore be notified, assessed and approved by the competent national State aid authority. Finally, it provides indications and criteria upon which the Secretariat may carry out its legal assessments in case of complaints submitted under Article 90 of the Treaty.

2. Policy Guidelines

The Secretariat will follow the principles and considerations set out in the present Policy Guidelines when assessing the compatibility of environmental impact assessments and strategic environmental assessments in the case of small hydropower projects under Article 16 of the Treaty as well as when assessing the compatibility of environmental and energy aid under Article 18(1)(c) and 18(2) of the Treaty. The present Policy Guidelines are thus of a declaratory nature, as the legal obligation to apply the provisions of the Energy Community *acquis communautaire* on environment, renewables and State aid on both national authorities and the Secretariat *ipso iure* follows from Articles 16 and 18 of the Treaty.

Vienna, 17 September 2020



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EXECUTIVE SUMMARY

In the past decade, the development of small hydropower projects boomed in the Energy Community Contracting Parties, in particular in the Western Balkans. This phenomenon has been predominantly driven by support schemes for energy generated from renewable sources and has ultimately led to growing public opposition and complaints to the Energy Community Secretariat concerning this topic.

Contracting Parties are to comply with targets for 2020 to increase their respective share of energy generated from renewable sources. In that process, additional hydropower projects seem to be obvious candidates. Hydropower is also widely considered as a cost-effective and reliable balancing solution, which can facilitate the increase of more intermittent renewables – wind and solar in particular – in the energy system. That said, environmental considerations shall be of prime concern in the case of such projects and full compliance with the *acquis communautaire* on environment is equally a minimum in the design, construction and operational phases.

The development of small hydropower projects may have significant impacts on a number of different factors, for instance nature and biodiversity, population, human health, agriculture soil, water and landscape. If such impacts and risks are not properly assessed in the project development phase, the negative consequences may be even greater and, in certain cases, irreparable. Local communities depending on the use of small watercourses in remote areas may be disproportionately affected by those damages.

Hydropower projects are by definition site-specific and tailor-made for local conditions. The success of a project depends on multiple factors: water rights, land acquisition, site access, buy-in and support from local municipalities are among the key factors. Stakeholder consultation and two-way communication throughout the entire project development process is essential, already starting at the planning phase. This requirement is also enshrined in the public participation provisions of the directives on environmental assessment, the aim of which is to increase the accountability and transparency of the decision-making process and to contribute to public awareness of environmental issues and support for the decisions taken.

Development of hydropower projects is often part of public policy to reach the aim to increase the share of energy generated from renewable sources and therefore receives support in many cases. This support can take many forms: direct financial support in the form of investment aid or operational aid (feed-in-tariffs or -premiums), guarantees to facilitate external funding, transfer or lease of land, access to water resources, construction of infrastructure for the connection of plants, etc. Any such support by the state may qualify as State aid and must therefore be notified, assessed and approved by the competent national State aid authority. Any such measure constituting State aid will only be approved if it ensures that the positive impact towards an objective of common interest exceeds its potential negative effects on trade and competition.

As announced by the Secretariat in its statement on 13 November 2018,¹ a stakeholder consultation shall take place and Policy Guidelines will be issued on the strategic and environmental impact assessment for small hydropower plants.

The present Policy Guidelines, as a result of the above-mentioned process and as a follow-up to the Sustainability Forum in the framework of which the stakeholder consultation took

¹ <https://energy-community.org/news/Energy-Community-News/2018/011/13.html>

place, reflects on small hydropower development in the Energy Community and sets out the Secretariat's considerations for investments in hydropower projects. While the focus of the document is the environmental assessment processes of these projects, it also addresses other relevant issues such as the effect of support schemes and State aid implications. They are provided for the use of project developers, competent authorities and the general public. Developers should take the requirements and recommendations into account from an early stage of the project development cycle, preferably already at pre-feasibility level.

Between 15 May and 15 June 2020, the Secretariat conducted a public consultation on the draft of the present Policy Guidelines.² Feedback gathered from the public consultation was incorporated in the final version of the document.

² <https://energy-community.org/news/Energy-Community-News/2020/05/13.html>

I. Introduction

Currently, hydropower has the largest share of renewable energy worldwide and according to forecasts of the International Energy Agency, it will remain so in the mid-term.³ Hydropower is a widely accessible source of renewable energy – at the same time, the development of hydropower often faces concerns, criticism and public opposition due to its potential major negative environmental impacts and the social consequences thereof.

One of the key objectives of the Energy Community Treaty, as enshrined in its Article 2(d), is to “*improve the environmental situation in relation to Network Energy and related energy efficiency, foster the use of renewable energy, and set out the conditions for energy trade in the single regulatory space.*”⁴ In concrete terms, Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (“Directive 2011/92/EU”) subjects certain hydropower projects to an environmental impact assessment or, as a minimum, to a preliminary procedure called screening.⁵ Furthermore, Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (“Directive 2001/42/EC”) subjects plans and programmes which are prepared for (among others) agriculture, forestry, fisheries, energy, industry, water management, town and country planning or land use and which set the framework for future development consent of projects listed in Directive 2011/92/EU to a procedure called strategic environmental assessment. Over the past years, Contracting Parties of the Energy Community have experienced a major uptake of hydropower projects, in particular small and micro ones.⁶ If planning and the assessment of their impacts are not carried out in an appropriate manner, such projects can cause large-scale environmental damage, while the electricity volumes generated by them may be minimal in comparison. In the past two years, the Energy Community Secretariat has received an increasing amount of complaints with regard to the improper implementation of the *acquis communautaire* on environment in the case of small hydropower projects.

The 2019 edition of the Energy Community Sustainability Forum touched base on the issue and participants acknowledged that the contribution of small hydropower plants to energy production in the Energy Community is extremely limited, while their impacts on the environment are disproportionately high. The environment in the Contracting Parties frequently falls victim to poor implementation of the rules on environmental assessment, with cumulative and transboundary impacts often not being assessed at all. Therefore, it was agreed that the development of greenfield projects should be scrutinised, while full and proper implementation of Energy Community legislation on environmental assessments (at project, river basin and regional level) is a prerequisite to any project.

A similar conclusion was drawn by the Western Balkans Investment Framework, which, in its 2018 report on sustainable development of hydropower, concluded that “*the development of greenfield projects should be limited to large hydropower plants, as the contribution of small*

³ <https://www.iea.org/reports/renewables-2019/power#abstract> – forecast up to 2024.

⁴ For the complete legal framework of the Energy Community see: The Energy Community Legal Framework 2018 4th Edition: <https://energy-community.org/legal/acquis/LFs.html>

⁵ Chapters IV.2-IV.5 deal with the questions related to environmental assessments in detail.

⁶ According to the information presented in the Eco-Masterplan for Balkan Rivers, a report by a consortium of NGOs, approximately 3,000 projects are planned or constructed in the Western Balkans (the number include projects in EU Member States Slovenia, Croatia, Bulgaria and Greece as well). In Montenegro, 55 concessions were granted between 2010 and 2018 (<https://balkanrivers.net/sites/default/files/who-pays-who-profits.pdf>, p. 27). In Albania, 111 hydropower projects below 10 MW went online between 2009 and 2018 (<https://balkanrivers.net/sites/default/files/who-pays-who-profits.pdf>, p. 21).

*hydropower plants (of a capacity 10 MW or less) to the global energy production is extremely limited while their impacts on the environment are disproportionately severe”.*⁷

The impacts of hydropower projects, irrespective of their size, very often are not limited to local level. Due to their cumulative nature, they can be felt over large parts of or even the entirety of river basins. The impacts can range from water usage and access rights, via biodiversity and other nature protection issues to economic or even physical consequences on local communities (relocation).



The present Policy Guidelines provide an overview of key aspects of the development of small hydropower in an Energy Community context: from the design of support schemes to the implementation of the provisions of Directive 2001/42/EC (Strategic Environmental Assessment – SEA) and Directive 2011/92/EU (Environmental Impact Assessment – EIA) and State aid implications in the Contracting

Parties. The Policy Guidelines are applicable to the development, construction and operation of small hydropower projects in the Contracting Parties and their purpose is to provide assistance to the competent authorities of the Contracting Parties, to project developers, investors and other relevant stakeholders concerned with the hydropower sector.

This document provides general guidance for environmental assessments applicable to the administrative and permitting procedures of new hydropower projects in the Contracting Parties. At the same time, it also provides indications and criteria upon which the Secretariat may carry out its legal assessments in case of complaints submitted under Article 90 of the Treaty.

⁷ WBIF, p. 14.

II. Main hydropower project types

The two most common forms of hydropower plants are based either on a storage scheme or a run-of-river scheme (diverting a part of the river flow to the plant). Run-of-river projects typically have a small storage capacity or none at all.

Hydropower facilities using a storage capacity usually have a dam holding back the water, which through raising its level creates an artificial reservoir (also called impoundment area), enabling – apart from the generation of electricity – the regulation of the downstream flow of the water.

The reservoir and the dam often form a significant barrier to the continuity of a river ecosystem and its functions, including sediments transit, fish migrations, and use of the river. Water from the reservoir can either be turbined at the base or toe of the dam or it may be diverted to a powerhouse located further downstream before being discharged back to the riverbed.

Run-of-river schemes typically rely on smaller cross-river structures rather than storage schemes, and have no or only a limited storage capacity: they consist of an intake which collects and diverts water via channels or pipes (also called penstock) to the turbine(s) in the powerhouse. Despite the lack of an impoundment area, the diversion of water can also result in significant fragmentation of both aquatic and terrestrial ecosystems by the construction of above-ground structures such as canals and penstocks.⁸

Since hydropower projects are designed for very long lifetimes (often extending 50 years), the constant availability of water is essential for the commerciality of the project. This is even more true in the case of hydropower projects located in mountainous areas, which are particularly vulnerable to the effects of climate change.

Table 1 – Categories of most common hydropower plant types

Run-of-river: Although most typical in the case of small projects, this type of hydropower system can also be found in larger facilities. In this scheme, electricity is produced through the existing flow and river elevation. Given that the natural flow of the river is used, there is no need to create a reservoir.
Storage run-of-river: This system is convenient to be used during peak periods, as its functionality is less dependent on the water flow. Stored water in the dam can provide seasonal or yearly storage, providing balancing capacities for the integration of other renewable energy projects.
Reservoir HPP: This type of HPP is usually adjustable to all types of seasons, dry and wet. The stored water is available to the plant in accordance with the necessity and can be effectively used either as a base load or a peak load plant. ⁹

Furthermore, the following sub-categories can be mentioned:

- micro hydropower;
- cascade hydropower (a sequence of plants on the same river);
- pumped-storage (a storage reservoir fed by water pumped up from a lower waterbody during off-peak hours, and from which the same water is released back through the turbine to the waterbody during peak hours);
- marine hydropower (tidal power plants, tidal turbines);

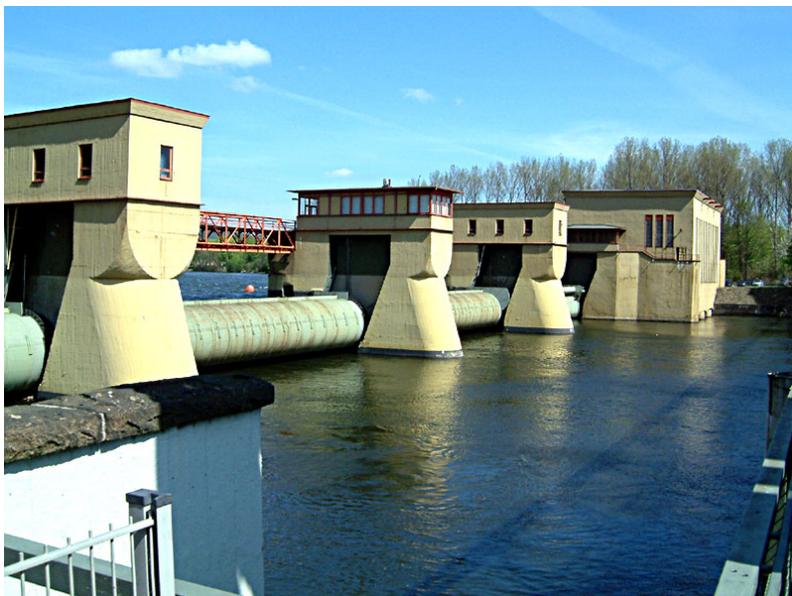
⁸ EBRD Environmental and Social Guidance Note for Hydropower Projects, p. 5.

⁹ European Commission Guidance on the Requirements for Hydropower in Relation to Natura 2000, p. 19.

- complex systems integrating a variety of interconnected storage reservoirs and production plants.¹⁰

Given the fact that the focus of the present guidelines is on small hydropower, the document predominantly addresses run-of-river or storage run-of-river hydropower projects.

With regard to the size of hydropower projects, it is to be noted that there is no uniform definition of large, small and micro hydropower projects. The most simple and common way to apply a distinction between projects is based on the installed capacity of the generator (expressed in megawatts) and/or the length of the head¹¹ (expressed in metres).



The 3.3 MW run-of-river HPP Hengstey between Herdecke and Hagen (Germany). The plant operates with three Kaplan turbines and generates 11 million kWh/year. Source: Wikimedia Commons CC BY-SA 3.0

Depending on the technology used, the hydropower industry considers projects from a few kW up to 3-5 MW as “mini” and projects up to 15-30 MW as “small” hydropower.¹² The Guide for

Developers and Investors of the International Finance Corporation considers the following groups of hydropower projects, based on capacity size (P)¹³:

- Micro – $P < 0.1$ MW
- Small – $0.1 \text{ MW} < P < 10 \text{ MW}$ (in certain cases up to 30-35 MW)
- Medium – $10 \text{ MW} < P < 100 \text{ MW}$
- Large – $P > 100 \text{ MW}$

In the renewables chapters of its Implementation Reports, the Energy Community Secretariat indicates hydropower plants below 10 MW as “small”, for statistical purposes.

Table 2 – Historic developments in hydropower generation technology¹⁴

Mid-1770s	Bernard Forest de Bélidor publishes <i>Architecture Hydraulique</i> . This four-volume work described vertical- and horizontal-axis hydraulic machines.
1849	James B. Francis develops a radial-flow turbine whereby water flows from the outer circumference towards the center of the runner, improving the design of the existing inward-flow reaction turbine. The radial-flow was the first modern turbine and it had an efficiency of over 90 percent. ¹⁵

¹⁰ EBRD Environmental and Social Guidance Note for Hydropower Projects, p. 5.

¹¹ Head is the height difference between where water enters into the system and where it leaves it. Depending on the water flow, the minimum amount of head required for a viable hydro system varies – with low head and low flow, the financial feasibility of a hydropower project is questionable.

¹² <https://www.andritz.com/products-en/hydro/markets/small-mini-hydropower-plants>

¹³ IFC: *Hydroelectric Power - A Guide for Developers and Investors*, p. 18.

¹⁴ *Ibid*, p. 13.

¹⁵ The Francis turbine is an inward-flow reaction turbine that combines radial and axial flow concepts and are the most commonly used water turbines.

1879	Lester Pelton develops a turbine based on a double bucket design, which exhausted the water to the side. ¹⁶
1881	Construction of Niagara Falls hydroelectric power site. It is the first hydropower facility developed for major generation. Direct current station built to power arc and incandescent lighting.
1882	Construction of Vulcan Street hydroelectric power plant, in Appleton, Wisconsin, with an output of about 12.5 kilowatts of alternating current. Coupling of electric generator to the turbine.
1913	Viktor Kaplan develops a propeller-type machine. It is an evolution of the Francis turbine that allows the development of low-head hydro sites. ¹⁷

For large projects, Directive 2011/92/EU applies a threshold based on the amount of water held back by the dam (*“Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres”* are referred to in Annex I of the Directive and hence subject to a mandatory environmental impact assessment). As presented in Chapter V of the present Policy Guidelines, when designing feed-in tariffs for hydropower, Contracting Parties generally apply either a threshold based on the capacity of the project (in MW) or the monthly amount of the electricity delivered (in kWh).



Exterior view of a Francis turbine attached to a generator (source: Wikimedia Commons CC BY-SA 3.0)

At the same time, when considering the distinction between “small” and “large” hydropower projects, capacity is not the only distinction that may be applied, especially when considering their environmental impacts. According to the European Bank for Reconstruction and Development, the term “small hydropower” refers to any hydropower project that does not trigger “category A” requirements¹⁸ and is located on a river with an average annual flow below 10 m³/s. For a hydropower scheme that uses water from multiple intakes, the sum of the average annual flows should be considered.¹⁹ The rationale for considering average annual flow rather than capacity for the determination between “small” and “large” projects is based on environmental and social considerations: minimum flows are commonly around 10% of the average flow.²⁰

The European Investment Bank’s Guidelines also touch upon project scale. While recognising that one simple and commonly used approach is to classify a scheme based on its installed capacity (in megawatts), the Bank calls upon taking other considerations into account. In terms

¹⁶ Pelton turbines are generally suitable for high heads and small flows.

¹⁷ Kaplan turbines are suitable for low heads and high flow applications.

¹⁸ “Category A” projects are the ones creating a large “dam” as defined by the International Commission on Large Dams (ICOLD); the ones including the construction of a high-voltage overhead electrical power line; the ones planned to be carried out in or likely to have a perceptible impact on protected/conservation area or the ones resulting in significant adverse social impacts to local communities or other project affected parties.

¹⁹ EBRD, Environmental and Social Guidance Note for Hydropower Projects, p. 4.

²⁰ One of the main issues with small HPPs is when they leave a very small minimum flow that does not leave enough water in the river to maintain native flora and fauna, preserve ecological continuity and water uses of the affected population. This typically happens when the minimum flow is less than 1 m³/s. The basis for the 10m³/s threshold is the minimum/average flow ration, as 1m³/s = 10% of 10m³/s.

of environmental impacts, distinction is based on the significant Degree of Regulation (DOR)²¹, if it is greater than 5%.²²

It is therefore of high importance for legislators and competent authorities alike that when transposing and implementing Annex II of Directive 2011/92/EU in the Contracting Parties, distinction between “large” and “small” hydropower projects is not based solely on the planned capacity of the project, with particular regard to screening decisions.²³ Although the Directive 2011/92/EU indeed allows a measure of discretion in establishing the thresholds for projects under Annex II, this discretion is limited by the obligation set out in Article 2(1). Projects need to be screened against all of the relevant criteria listed under Annex III, regardless of the capacity of the plant. Furthermore, when it comes to capacity, it is also highly important that planned projects on the same river and/or water basin are not assessed in isolation but their capacities as well as their environmental impacts shall be scrutinized in a cumulative manner.

²¹ DOR is defined as the ratio between the total artificial storage capacity (including any upstream reservoirs) and the average annual flow volume at the project site.

²² EIB, Environmental, Climate and Social Guidelines on Hydropower Development p. 2.

²³ Screening decisions under Annex II of Directive 2011/92/EU often result in a conclusion that an environmental impact assessment is not necessary, based only on the planned capacity of the plant.

III. Environmental issues related to small hydropower projects

The construction of all types of hydropower projects may have significant impacts on a number of environmental factors, albeit differences exist between large and small ones.

III.1. Population and human health

Ecosystems play a vital role in human well-being, and any hydropower development has the potential to impact important ecosystems and the communities depending on them. The typical impacts on population and human health related to the construction of hydropower projects may relate to:

- Physical population displacement or resettlement. This is more typical in the case of large projects but not excluded also in the case of small ones, especially when considered together with water usage. Small hydropower projects are often located in remote areas where the local population is heavily dependent on the use of the local watercourses, the alteration or piping of which may ultimately lead to displacement or resettlement.
- Temporary or permanent changes in employment patterns, livelihoods and other activities. If the development of a small hydropower project disturbs the water usage further downstream (e.g. by not providing sufficient water for agriculture and/or animal husbandry), this impact can be very serious.
- Impairments of property rights of citizens living in the vicinity of the project, with particular regard to the development of access roads to and electricity grids from the project. Given the typical location of small hydropower projects, providing access to and from the watercourse used for energy purposes is often a difficult task, both from a technical and from a legal perspective, and it may entail a number of impairments of property rights of citizens in the area.
- Restrictions of right of access to water and/or land; downstream effects related to water usage.²⁴ In the case of small projects, it is often the case that water of the river is diverted into pipes to increase its velocity, with the aim to generate more electricity. This practice can leave the riverbed empty, with drastic consequences on access to water.
- Effects on water quality with direct or indirect health impacts.

III.2. Biodiversity

The modification or diversion of the watercourse and/or its change from flowing water (lentic) to still water (lotic) can all have significant effects on biodiversity. Impacts of the construction of a small hydropower project on biodiversity may entail:

- Effects of fresh water and hydromorphology: certain species may be sensitive to the slightest alteration of their surrounding environment. This means that if the temperature, speed or other characteristics of the water are changed because of the project, the endemic species may not be able to adapt to the new environment and ultimately disappear. Dams or other blockages in the watercourse can fundamentally change the chemical quality, mineral composition and the pH of the river both up and downstream, for instance by accumulating contaminants in sediments. Piping can leave the riverbed empty and completely deprive the local ecosystem from fresh water. All these changes influence the composition of plant and animal communities present.

²⁴ Given the fact that the typical location of small hydropower projects are geographical areas where agriculture is one of most important sectors, projects may have an impact on such activities as well.

- Degradation potential of ecosystem services: if the water is diverted into pipes and the riverbed is left dry even for short periods of time, it has an extremely high degradation potential to the whole riverbed ecosystem. Also, extremely high degradation can be expected in cases where the water is diverted from one river basin to another.
- Loss and/or degradation of the habitats concerned: as a consequence of the above two points. Fish have a particularly noticeable dependence on water current conditions and water depth and may therefore be sensitive to the smallest alterations therein.
- Loss of species diversity and genetic diversity: endangered species are generally more sensitive to changes in the local environmental conditions than others. Therefore, the installation of a project poses higher risks to them. The disappearance of such species gives way to already present, more resilient and/or non-endemic, invasive species, which reduce biodiversity in the area.
- Effects on the habitats in the surrounding areas: given the natural interconnections between ecosystems, the impacts may spill over the immediate vicinity of the project. Fish are the natural prey of several raptors (mammals and birds alike) and the reduction of their numbers or – in an extreme case – their disappearance may have detrimental negative effects in the food chain.

In the development of a hydropower project, aquatic biodiversity is the most directly affected ecosystem. A good understanding of the nature of aquatic ecosystems (habitats, riparian flora, macroinvertebrates, fish, aquatic and semi-aquatic mammals and amphibians) is the basis for an assessment of the impacts of a hydropower scheme on these ecosystems.²⁵ The different phases of project development may entail different effects on aquatic biodiversity: construction is particularly dangerous to species living in the riverbed, while dams and reservoirs (whether large or small) may be beneficial for some species while detrimental to others.

Furthermore, penstocks, turbines and spillways are a barrier to fish species migrating upstream, or a life threat when moving downstream. The degree of mortality can vary from 0 to 100% at a single hydropower plant, depending on the type of fish present, on the type of hydropower construction and the mitigation measures used. The mortality rate of turbines increases with the velocity and number of rotor blades and decreasing with distance between the blades. Mortality can reach 100% when fish pass through turbines that are mainly in high-pressure plants.²⁶



Danube salmon (Hucho hucho) swimming against the current in the Drina river (Source: Wikimedia Commons, CC BY-SA 4.0)

To be able to assess such effects, the careful identification of the aquatic biodiversity and its interlinkages with other biodiversity forms in the vicinity of the project has crucial importance, with special attention to be paid to endangered species.

However, this does not mean that the developer should underestimate the importance of the baseline assessment of the impact to other terrestrial

²⁵ EBRD, Environmental and Social Guidance Note for Hydropower Projects, p. 15.

²⁶ European Commission, DG Environment: *Guidance on the Requirements for Hydropower in Relation to Natura 2000*, p. 26.

species, ecosystems and habitats. Serious impact to terrestrial species, ecosystems and habitats can occur during the construction, decommissioning or renovation of hydropower plants and of their associated infrastructure (such as access roads, pipe routes, or powerlines designed to connect the hydropower facility to the electricity grid).

Some habitats are more resilient to changes in their surrounding environment than others, therefore the degradation or loss of one species might cause imbalance in the local ecosystem. These effects might be even more detrimental based on the location of the hydropower project – for instance, if it is located along fish or bird migratory routes, narrow valleys with cliffs used by raptors, or next to important bird wetlands.²⁷

Another aspect that should be taken into account is the impact of the hydropower project in correlation with other planned or existing projects (including other hydropower projects). The interaction of a hydropower plant or project with other existing plants or projects can pose significant effects on biodiversity. As the European Commission notes, most European rivers are now in a degraded state and the majority have reached a saturation point where they can no longer host any new developments or activities without causing a further significant deterioration of the river's status.²⁸

III.3. Land, soil, air and climate

Apart from the direct impacts of small hydropower projects on water, there are also other factors and environmental media which may also be significantly affected and which have to be taken into account in the development phase.

Impacts on land and soil are predominantly related to the control of riverbank erosion and flow regulation (flood control). At the same time, the structural complexity and highly dynamic nature of rivers and lakes make them exceptionally rich ecosystems, bringing lifeblood, or in this case water, to large parts of the soil of the surrounding countryside. They are also responsible for the development of a rich mosaic of interconnected, water-dependent wetlands such as floodplain forests, marshes, humid grasslands, fens, wet meadows, all of which further enhance their overall biodiversity.²⁹

Watercourses and their floodplains play an important role in the water and substance balance of an area. Apart from changing conditions of precipitation and the size of the catchment area, it is above all geological conditions and vegetation that have a considerable influence on flow process in waters, on flow duration and fluctuation. With high water, when water overflows banks and seeps away over a wide area, large quantities of water quickly infiltrate in flooded riverine wetlands. When the high water recedes, the infiltrated water seeps back into the watercourse. Riverine floodplains thus represent a substantial water reservoir and a natural high- and low-water buffer. Vegetation and surface relief in natural floodplains favour sedimentation at times of high water, and thereby contribute to substance retention in the area. As a result of high rates of evaporation of floodplain vegetation in summer months, the microclimate is strongly affected. Through hydraulic engineering operations, in particular through watercourse correction, impounding, water body maintenance and intensive land use,

²⁷ Ibid.

²⁸ Ibid. p. 27.

²⁹ Ibid, p. 16.

the natural configurations of watercourses and their floodplains are generally greatly modified.³⁰

With regard to considerations related to the effects of climate change, they can be regarded from two sides in the case of hydropower projects:

- the consideration of the impact of the construction of the project itself on climate³¹ and
- the impact of climate change on the project in the mid-to-long term.

It also has to be noted that although hydropower plants, using a renewable energy source, contribute to the reduction of greenhouse gas emissions in their operational phase, there are still certain climate-related considerations which need to be assessed in relation to their construction phase. These can be:

- greenhouse gas emissions related to indirect effects of the project (for example: change in land use, deforestation necessary for to construction of access roads)
- emissions related to the construction of the plant's transport infrastructure;
- emissions related to the materials used in construction (especially concrete);
- emissions of the transport and construction machinery.

III.4. Material assets, cultural heritage and the landscape

Small hydropower projects are mostly located in mountainous areas, which have very specific landscapes and – apart from the inherent biodiversity value – beautiful sceneries of which small watercourses are naturally forming part. Various stages of the development phases of hydropower projects, irrespective of their size, can result in loss, degradation or fragmentation of such landscapes, related material assets and cultural heritage. The construction (temporary or permanent access roads, construction workshops and camps, diversion channel(s) to divert water flows during construction, transportation and installation of pipes) and operation (installation of the necessary electricity infrastructure and transmission lines, permanent offices and staff accommodation, fencing) of small hydropower projects may have significant direct impacts on the landscape and material assets and indirect ones on cultural heritage.

³⁰ Umweltbundesamt, Germany: *Hydroelectric Power Plants as a Source of Renewable Energy - legal and ecological aspects*, 2003, p. 63.

³¹ While methane emissions arising from the underwater decay of vegetation in the case of large hydropower projects (with particular regard to projects in tropical areas) may indeed be a direct climate-related impact, in the case of small hydropower plants and run-of-river schemes, this is not the case. Small projects are however also not free of greenhouse gas emissions, especially related to their construction phase.

IV. Legal framework in the Energy Community and in the Contracting Parties

Currently, the Energy Community has nine Contracting Parties: Albania, Bosnia and Herzegovina, Georgia, Kosovo*³², North Macedonia, Moldova, Montenegro, Serbia and Ukraine. By signing the Energy Community Treaty, Contracting Parties undertake the obligation to transpose and implement the *acquis communautaire*, in order to assist them creating a regulatory market framework, which is capable of attracting investment for a stable and continuous energy supply.

The *acquis communautaire* is based on EU law, which is adapted for the specific needs of the Contracting Parties, taking into consideration their specific situation and socio-economic development. The implementation status of the Contracting Parties is assessed continuously and presented sector-by-sector in the Annual Implementation Report of the Energy Community Secretariat.³³

IV.1. The *acquis communautaire* on renewables

As stipulated by Article 2(d) of the Energy Community Treaty, Contracting Parties are to foster the use of renewable energy. Article 20 of the Treaty³⁴ establishes Directive 2009/28/EC as the *acquis communautaire* on renewables, the implementation of which is to safeguard compliance with that task.



Directive 2009/28/EC, as adapted, determines the Contracting Parties' binding national targets to be achieved through the use of renewable energy in the electricity, heating and cooling, and transport sectors by 2020. For determining the targets, a similar methodology as for the EU Member States was applied.

³² Throughout the present Guidelines, this designation is without the prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

³³ <https://energy-community.org/implementation/IR2019.html>

³⁴ As amended by Decision 2012/04/MC-EnC.

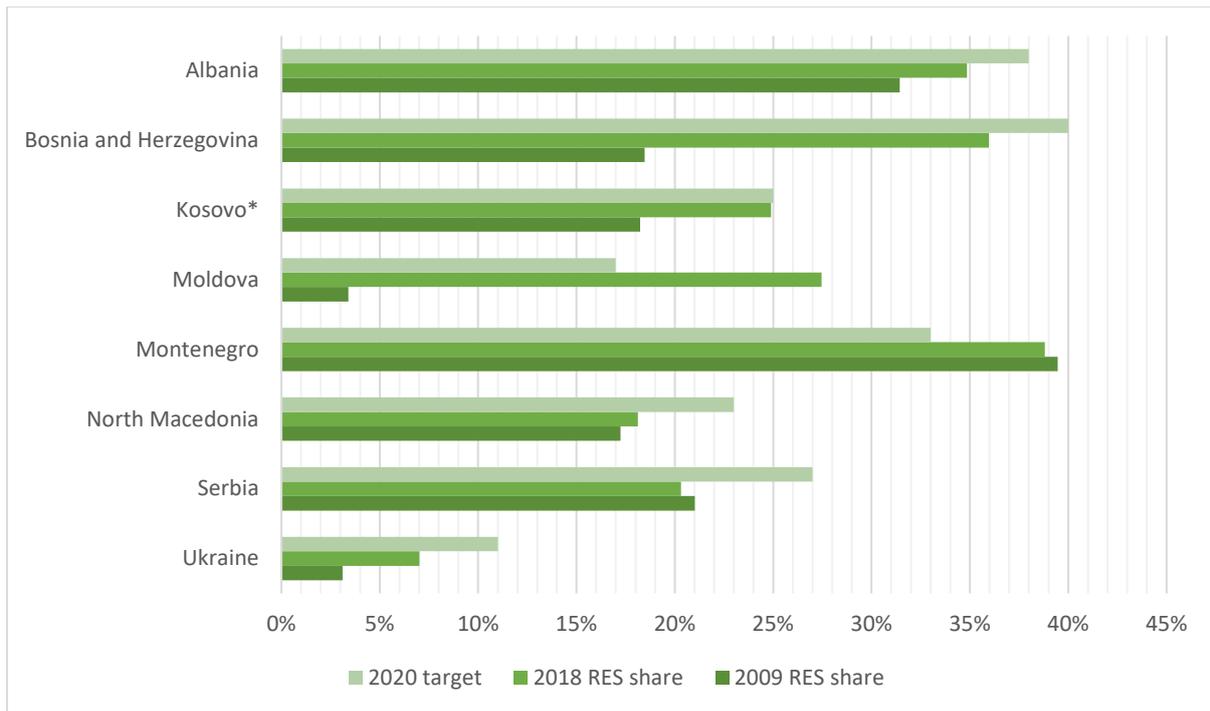


Figure 1: Renewables targets in the Contracting Parties³⁵

IV.2. The *acquis communautaire* on State aid

In order to prevent State support from distorting competition in the internal market and affecting trade between Contracting Parties in a way which is contrary to the common interest, Article 18 of the Energy Community Treaty lays down the principle that State aid is prohibited. It provides that any public aid which distorts or threatens to distort competition by favouring certain undertakings or certain energy resources shall be incompatible with the proper functioning of the Treaty, insofar as it may affect trade of Network Energy between the Contracting Parties.

In certain cases, however, State aid may be compatible under Articles 107(2) and (3) of the Treaty on the Functioning of the European Union (TFEU), which is included in Annex III to the Treaty. On the basis of Article 107(3)(c) TFEU, State aid may be compatible if it facilitates the development of certain economic activities. Therefore, the European Commission's Guidelines on State aid for environmental protection and energy 2014-2020 ("EEAG") set out the conditions under which aid for energy and environment may be considered compatible.

Based on the principle of homogeneity as regards the application of EU and Energy Community rules enshrined in Articles 18(2) and 94 of the Treaty and Article 2 of the Rules of Procedure for Dispute Settlement, the Secretariat has committed to follow the considerations and requirements set out in the European Commission's EEAG when assessing the compatibility of environmental and energy aid with the functioning of the Energy Community and endorsed the EEAG to make them the point of reference for its own enforcement practice. The Secretariat further considers that the EEAG are to be followed by national enforcement

³⁵ Source: Energy Community Secretariat. In November 2018, the Ministerial Council amended the mandatory national overall target for North Macedonia to 23% from a previously adopted 28% target. Due to its later accession to the Energy Community, Georgia does not have an obligatory 2020 renewables target.

authorities in order to ensure their uniform and homogeneous application in the entire Energy Community.³⁶

IV.3. The *acquis communautaire* on environment

Based on Article 12 of the Energy Community Treaty, Contracting Parties are under an obligation to implement the *acquis communautaire* on environment in compliance with the timetable set out in Annex II.

Annex II to the Treaty lists the following directives as part of the Energy Community *acquis communautaire* on environment:

Table 3 – The Energy Community *acquis communautaire* on environment

- **Directive 2011/92/EU of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, as amended by Directive 2014/52/EU;**³⁷
- Directive (EU) 2016/802 of 11 May 2016 relating to reduction in the sulphur content of certain liquid fuels;³⁸
- Directive 2001/80/EC of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants;
- Directive 2010/75/EU of 24 November 2010 on Industrial emissions (integrated pollution prevention and control);³⁹
- Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds;
- Directive 2004/35/EC of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, as amended by Directive 2006/21/EC, Directive 2003/31/EC and Directive 2013/30/EU;⁴⁰
- **Directive 2001/42/EC of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.**⁴¹

Directive 85/337/EEC (the predecessor of Directive 2011/92/EU both under EU and Energy Community law) was already part of the Energy Community *acquis communautaire* on environment at the time of signature of the Treaty in 2005, with a deadline corresponding to its entry into force. As a result, Contracting Parties are already under an obligation to carry out environmental impact assessments in the case of projects related to Network Energy⁴² since 1 July 2006, the date of the entry into force of the Treaty. Directive 2011/92/EU is a codified version of Directive 85/337/EEC – this means that the former incorporates subsequent amendments to the latter Directive. The amendments codified by Directive 2011/92/EU formed part of the provisions related to environmental impact assessment in 2005, at the time of signature of the Treaty. This means that in relation to energy projects, Contracting Parties already were on an equal footing with EU Member States in terms of their obligations referred to in Annexes I and II of the Directive.

In 2014, Directive 2014/52/EU amended Directive 2011/92/EU in the European Union. In October 2016, Decision 2016/12/MC-EnC of the Ministerial Council of the Energy Community

³⁶ See also Policy Guidelines 04/2015.

³⁷ As amended by Decision 2016/12/MC-EnC of the Ministerial Council.

³⁸ As amended by Decision 2016/15/MC-EnC of the Ministerial Council.

³⁹ As introduced by Decision 2013/06/MC-EnC of the Ministerial Council.

⁴⁰ As introduced by Decision 2016/14/MC-EnC of the Ministerial Council.

⁴¹ As introduced by Decision 2016/13/MC-EnC of the Ministerial Council.

⁴² According to Article 2(2) of the Energy Community Treaty (as amended by Article 1 of Decision 2008/03/MC-EnC of 1 December 2008), "Network Energy" shall include the electricity, gas and oil sectors.

amended Annex II of the Treaty and included those amendments also for the Contracting Parties with a deadline of 1 January 2019.

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment was originally not part of the Energy Community *acquis communautaire* on environment at the time of signature of the Treaty and was incorporated by Decision 2016/13/MC-EnC of the Ministerial Council in October 2016. The deadline for its implementation was 31 March 2018.

Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds requires the adoption of special conservation measures for certain endangered species that will prohibit their deliberate disturbance during breeding, rearing, hibernation and migration; the deterioration or destruction of breeding sites or resting places and the deliberate destruction of nests or eggs, or the uprooting or destruction of protected plants. The general implementation deadline for Directive 79/409/EEC in the Energy Community was 1 July 2006.

IV.4. Relationship between EIA and SEA

The purpose of both procedures, the environmental impact assessment and the strategic environmental assessment is to ensure that administrative decisions, whether taken at plan or programme level (SEA) or project level (EIA) take into account the significant impacts of such decisions on the environment. In both procedures, the central tool to comply with this obligation is the so-called environmental report, which has to present the findings of the developer about the environmental impacts of the project, plan or programme, and which has to serve as the basis of the informed decision of the competent authority. The involvement of the public concerned has to be ensured throughout the process, both at strategic and project level. Public participation in environmental matters is regulated at the level of international law by the Aarhus Convention,⁴³ which was transposed into EU law by – among others – these provisions.



Article 3(2) of Directive 2001/42/EC also makes a clear link between the two directives when defining its own scope, by stipulating that an environmental assessment shall be carried out for plans and programmes “*which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and **which set the framework for future development***”

⁴³ UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, adopted on 25 June 1998 in the Danish city of Aarhus (Århus). The Convention entered into force on 30 October 2001 and in EU environmental law, it is transposed (among others) by the provisions of Directives 2011/92/EU and 2001/42/EC.

consent of projects listed in Annexes I and II to Directive 85/337/EEC". It is therefore clear that plans and programmes, upon which projects requiring an EIA would be developed, require a strategic environmental assessment. In the case of the development of (both small and large) hydropower projects, this would be applicable for plans and programmes such as energy strategies, river basin management plans or other strategic documents related to water use and management, documents related to land use planning, etc.

The interaction between environmental assessments and other pieces of the EU environmental *acquis* is presented below in Figure 2, whereby the Industrial Emissions (IED) and Birds Directives also form part of the Energy Community *acquis communautaire* on environment.

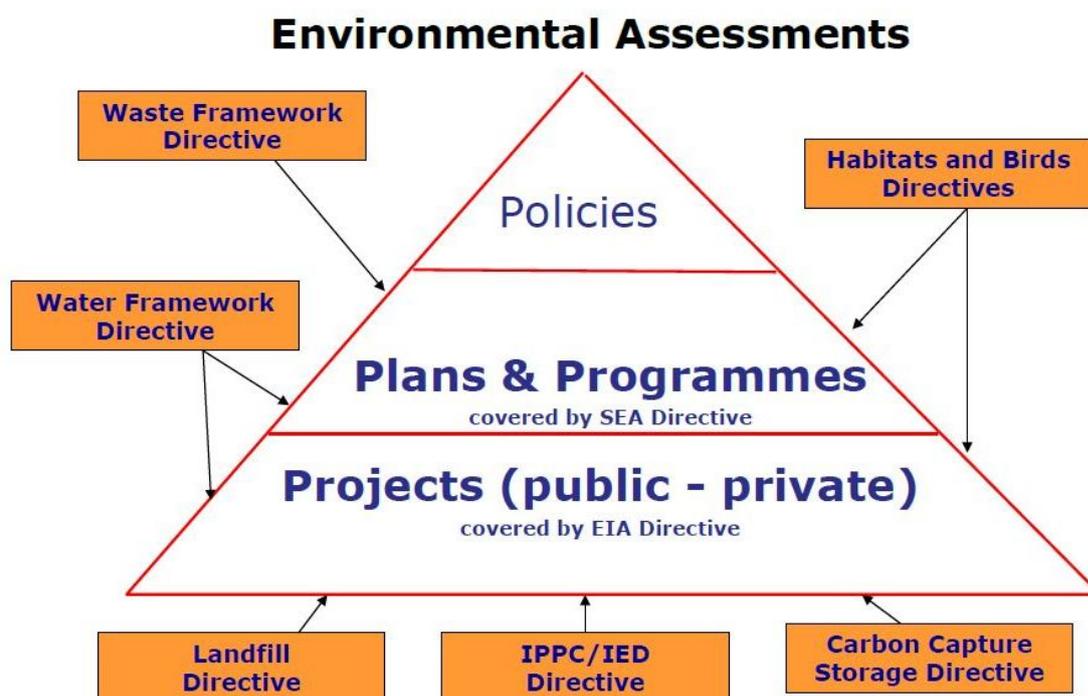


Figure 2 – Interaction between environmental assessments and other pieces of EU environmental law (source: Presentation of the European Commission at the 11th meeting of the Energy Community Environmental Task Force, June 2016)

The similarities of the procedures and the clear interlinkages between the provisions of both directives make it possible for the national legislator to integrate them under the scope of one law. At the same time, there are also certain differences that need to be observed in order to avoid confusion between the procedures.

Table 4 – Short description of the process – key provisions	
EIA	SEA
<ul style="list-style-type: none"> ✓ Screening (where applicable) for projects under Annex II: the competent authority first needs to decide whether there is a need for an environmental impact assessment, using the screening criteria in Annex III – Article 4(2) 	<ul style="list-style-type: none"> Screening applicable only for <ul style="list-style-type: none"> ✓ Plans and programmes using small areas at local level – Article 3(3) ✓ Minor modifications to plans and programmes – Article 3(4) ✓ Plans and programmes not covered by Article 3(2) – Article 3(5)
<ul style="list-style-type: none"> ✓ Scoping (determination by the competent authority of the scope and level of detail of the information to be included by the 	<ul style="list-style-type: none"> ✓ Scoping is mandatory in SEA – Article 5(4)

<p>developer in the environmental impact assessment report): voluntary as minimum, transposing legislation may require mandatory scoping – Article 5(2)</p>	
<p>✓ EIA report: the developer has to prepare the detailed report on the foreseen impacts of the project (on the factors elaborated in Chapter III of the present Guidelines) and submit it to the competent authority – Article 5 and Annex IV</p>	<p>✓ Environmental report: the authority responsible for the adoption of the plan or programme has to prepare the detailed report on its foreseen impacts and submit it to the competent authority for SEA – Article 5 and Annex I</p>
<p>✓ Public participation: the public concerned⁴⁴ has to be provided with the possibility to be involved in the decision-making procedure throughout the process – Article 6(2)-(7)</p>	<p>✓ Public participation: <i>before</i> the adoption of the plan or programme or its submission to the legislative procedure, early and effective opportunities within appropriate time frames have to be ensured to the public concerned⁴⁵ to express their opinion on the draft plan or programme and the accompanying environmental report – Article 6</p>
<p>✓ Transboundary assessment: based on information available to the competent authority or upon the request of another Contracting Party / EU Member State concerned – Article 7⁴⁶</p>	<p>✓ Transboundary assessment: based on information available to the competent authority or upon the request of another Contracting Party / EU Member State concerned – Article 7⁴⁷</p>
<p>✓ Information on the decision: The competent authority is obliged to take into consideration the information obtained from the public consultations and include in the decision how they have been integrated – Article 9(1)</p>	<p>✓ Information on the decision: The competent authority is obliged to take into consideration the information obtained from the public consultations and include in the decision how they have been integrated – Article 9(1)</p>
<p>✓ Access to justice: following the adoption of the decision, the public concerned has the possibility to challenge it at the appropriate judicial bodies – Article 11</p>	<p>The Directive does not contain provisions on access to justice.</p>

IV.5. Projects under Annex I and Annex II of Directive 2011/92/EU

Article 4(1) of Directive 2011/92/EU requires projects listed in its Annex I to undergo a mandatory environmental impact assessment. According to point (15) of Annex I to the Directive, projects which are constructed for the holding back or permanent storage of water,

⁴⁴ Article 1(2)(e) of Directive 2011/92/EU defines “public concerned” as meaning “the public affected or likely to be affected by, or having an interest in, the environmental decision-making procedures referred to in Article 2(2). For the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.”

⁴⁵ Article 2(d) of Directive 2001/42/EC defines “the public” as “one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups”. Articles 6(2) and 6(4) of the Directive call upon the competent authority to identify the public concerned in each case.

⁴⁶ Due to their nature, hydropower projects, even if small, often have transboundary impacts if located close to a border.

⁴⁷ Due to their nature, hydropower projects, even if small, often have transboundary impacts if located close to a border.

where a new or additional amount of water held back or stored exceeds 10 million cubic metres, fall into this category.⁴⁸

Article 4(2) of Directive 2011/92/EU subjects all projects listed in its Annex II to an environmental impact assessment based either on an individual assessment (also known as screening) or on threshold or criteria set by the transposing national legislation. Point (h) of Chapter 3 of Annex II to the Directive lists “Installations for hydroelectric energy production” in the case of which an environmental impact assessment is required based on either of the above two options. An overview of the transposition of this clause by Contracting Parties is provided below (Table 5).

In accordance with Article 4(3)-(5) of Directive 2011/92/EU, Contracting Parties may apply both approaches, meaning that the adoption of a general threshold for hydropower projects does not automatically exclude the requirement for a case-by-case examination to determine whether the project would still need to be subject to an environmental impact assessment. The location of the project or the local environmental conditions may still prove necessary to carry out the process. When making such determinations, Contracting Parties shall consider whether projects are carried out in ecologically sensitive areas, how they affect the surface of the land shaft and what is the area covered by such projects.⁴⁹

Furthermore, as also mentioned above, the measure of discretion in establishing the thresholds for projects under Annex II is limited by the obligation set out in Article 2(1), namely the obligation to carry out an environmental impact assessment based on the nature, size or location of the project (taking into account cumulative effects, including the accumulation of effects with other existing and/or approved projects as well as any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources). Where several projects, taken together, may have significant effects on the environment, their environmental impact should be assessed as a whole. The Court of Justice of the European Union (CJEU) has systematically stressed that the purpose of the Directive cannot be circumvented by the splitting of projects.⁵⁰ In the case of small hydropower, this jurisprudence is very important for cascade projects, the environmental effects of which are naturally accumulated.⁵¹ If a case-by-case examination of the planned hydropower project is carried out, this shall be done in accordance with the criteria stipulated in Annex III to Directive 2011/92/EU, also referred to as the “screening criteria”.

IV.6. Overview of the regulatory scope of small hydropower plants in the Contracting Parties

This section provides an overview of the thresholds set by the respective transposing national legislations of the Energy Community Contracting Parties, which differentiates among the size of hydropower projects in terms of whether a mandatory environmental impact assessment shall be carried out, or the project should first be subject to a screening.

⁴⁸ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment Annex I (15).

⁴⁹ DG Environment, *Interpretation of Definitions of Project Categories of Annex I and II of the EIA Directive*, p. 12.

⁵⁰ Interpretation of definitions of project categories of Annex I and II of the EIA Directive, European Commission, p.15 “*Salami slicing refers to the practice of splitting an initial project into a number of separate projects, which individually do not exceed the threshold set or do not have significant effects on a case-by-case examination and therefore do not require an impact assessment but may, taken together, have significant environmental effects*”

⁵¹ Case C-147/07, *Ecologistas en Acción-CODA*, paragraph 44; Case C-205/08, *Alpe Adria*, paragraph 53.

Table 5 – Legislative thresholds in the Contracting Parties for an EIA in the case of hydropower projects

Contracting Party	MW
Albania	N/A ⁵²
Bosnia and Herzegovina	2-5 ⁵³ N/A ⁵⁴
Georgia	2-5 ⁵⁵
Kosovo*	N/A ⁵⁶
North Macedonia	2-10 ⁵⁷
Moldova	N/A ⁵⁸
Montenegro	1 ⁵⁹
Serbia	2 ⁶⁰
Ukraine	0 ⁶¹

The practice of setting a fixed capacity threshold for a mandatory environmental impact assessment of hydropower development projects has been criticised, stating that legislators employ a high threshold for hydropower projects to fall under the definition of small hydropower, thereby automatically excluding them from a mandatory environmental impact assessment.⁶² At the same time, as it can be seen from the information presented in Table 6

⁵² Point 3.h of Annex II of the Law on Environmental Impact Assessment (Law 10440 of 7.7.2011) refers to "Installations for hydroelectric energy production". Based on this, it has to be considered that in Albania all hydropower projects are subject to screening.

⁵³ Federation of BiH: Article 4 of the "Rulebook on Installations for with EIA is mandatory and Installations for which Environmental Permit is Mandatory" (Official Gazette FBiH 19/04) subjects "Hydroelectric power generating plants with an output exceeding 5 MW for single drives or more than 2 MW for several drives following each other less than 2 km away" to EIA.

⁵⁴ Republika Srpska: Point (4) of Article 2(a) of the "Rulebook on projects for which an environmental impact assessment is needed and the criteria for deciding the required implementation and scope of the EIA" (Official Gazette Republika Srpska, 124/12) stipulates that all hydropower projects with more a capacity above 5 MW needs to undergo a mandatory EIA. According to Point (9) of Article 3(a), all other hydropower projects which do not fall under Article 2 shall be subject to case-by-case assessment.

⁵⁵ Point 3.8 of Annex II of the Law on Environmental Impact Assessment (1 June 2017) exempts "Construction and operation of hydroelectric power plant from 2 MW to 5 MW" from a mandatory EIA.

⁵⁶ Point 3.8 of Annex 2 of the Law on Environmental Impact Assessment uses the same wording as Directive 2011/92/EU ("Installations for hydroelectric energy production - projects not included in Annex 1"). In Annex 1, "Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds five (5) million m³" are subjected to a mandatory EIA. Based on this, it has to be considered that in Kosovo* all hydropower projects are subject to screening.

⁵⁷ Point 3(f) of Annex II of the "Regulation for definition on Projects and basic Criteria for Environmental Implementation Needs for Environmental Evaluation Procedures" (Official Gazette No. 59/2000, 12/03 and 55/05) subjects all hydropower projects not listed in Annex I to screening. Small HPPs are primarily regulated with the Decrees on the activities for which an environmental elaborate is obligatorily (Official Gazette No. 80/09). Environmental elaborates for HPPs with a maximum installed capacity of 2 MW are approved by the Municipality and environmental elaborates for HPPs with a maximum installed capacity of 2-10 MW are approved by the Ministry of Environment. Due to this overlap of regulations, HPP projects under 10 MW are not systematically screened in North Macedonia.

⁵⁸ Point 3(h) of Annex II to Law Nr. 86 of 29.05.2014 on Environmental Impact Assessment refers to "Installations for the production of hydropower" without a threshold.

⁵⁹ List II, Article 3(b) of "Decree on projects for which the environmental impact assessment is carried out" – Official Gazette No. 80/05 and No. 47/13.

⁶⁰ List II, point 3(2) of "Decree on determining the List of projects for which the environmental impact assessment is obligatory and the List of projects for which the environmental impact assessment may be required", Official Journal No. 114/2008.

⁶¹ "Decree No. 808 of 28 August 2013 of the Cabinet of Ministers on the list of activities and objects which pose increased environmental danger" classifies the following projects as being of high risk and thereby subjecting them to a mandatory EIA: "In the field of hydropower: hydropower on rivers regardless of their power (including small hydropower); pumped storage power plant".

⁶² WWF Adria et al., EIA/SEA of Hydropower Projects in South East Europe – Meeting the EU Standards, p. 32.

below, the current practices of Contracting Parties are in line with those of EU Member States and therefore can be considered as sufficient to implement Directive 2011/92/EU.

Table 6 – Legislative thresholds in selected EU Member States for an EIA in the case of hydropower projects

Member State	MW
Austria	2-15 ⁶³
Croatia	N/A ⁶⁴
Germany	N/A ⁶⁵
Hungary	0-5 ⁶⁶
Latvia	N/A ⁶⁷
Spain	0 ⁶⁸

No matter what threshold applies, the obligation to screen the potential impact of hydropower projects cannot be circumvented, which may particularly be true with regard to the local environmental conditions of the site,⁶⁹ irrespective of the size of the project. The obligation to screen the potential impact is particularly important for the Contracting Parties that have introduced different assessment types based on that threshold.

IV.7 Common steps and key provisions in environmental assessment procedures

Once it is clear that an environmental impact assessment needs to be carried out, the procedure is initiated by the developer who has to notify the competent authority about the intention to develop a project falling under the scope of the Directive.

In case of strategic environmental assessment, it is the two joint facts that

- plans or programmes are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and
- they are required by legislative, regulatory or administrative provisions

which triggers the application of the Directive.

Once the procedure has started, many steps of both environmental impact assessment and strategic environmental assessment are conducted in the same sequence, as also presented above in Table 4.

⁶³ Law on EIA (UVP-G 2000), as amended, Annex I, Z30: mandatory EIA applies a) above 15 MW as a general rule, b) 10 MW when the length of water held back is more than 20 times longer than the dam width and c) 2 MW in the case of cascade hydropower projects.

⁶⁴ According to point 2.2 of Annex II of the Regulation on EIA (NN 61/2014 as amended by NN 3/2017), all hydropower projects (irrespective of their capacity) are subject to a screening.

⁶⁵ Point 13.14 of Annex I of the Law on EIA (UVPG) subjects “the construction and operation of a hydropower plant” to mandatory case-by-case screening.

⁶⁶ Point 29 of Annex I of Government Decree 314/2005 subjects all hydropower projects (irrespective of their capacity) located in protected areas of national importance to a mandatory EIA. Point 73 of Annex II subjects all projects (irrespective of their capacity) located in a water basin protection area or in a protected area (irrespective of the level of protection), as well as any hydropower project with a capacity above 5 MW to a mandatory screening.

⁶⁷ Point 3.7 of Annex II of the Law on EIA (Latvijas Vestnesis 322/325, as amended) subjects hydropower projects to a screening in two cases: if a new hydropower plant is constructed (without threshold) or if an existing hydropower plant is reconstructed, thus affecting the hydrological or hydrogeological regime.

⁶⁸ Point 9.8 of Annex I of the Law on EIA (21/2013 of 9 December) subjects all hydropower projects located in a protected area to a mandatory EIA. Point d) of Group 4.1 of Annex II of the Law subjects all other hydropower projects (without threshold) to a mandatory screening.

⁶⁹ E.g. average and minimum water flow, protected species present, landscape, etc.

IV.7.1. Screening

The process under Article 4(2) of Directive 2011/92/EU, which determines whether an environmental impact assessment is required for the projects falling under the scope of Annex II of the EIA Directive, is commonly referred to as “screening”. Screening can be conducted either by a case-by-case assessment or thresholds or criteria set by the Contracting Party. Therefore, Contracting Parties have the discretion to adopt either of the approaches in examining whether an environmental impact assessment is required.

The criteria to determine whether projects listed in Annex II shall be subject to an EIA shall be set in accordance with Annex III, which establishes three categories of criteria:

- characteristics of the project;
- location of the project;
- type and nature of potential impact (including potential cumulative impacts).

When setting the screening criteria, the transposing legislation shall do that in compliance with the criteria set out in Annex III of Directive 2011/92/EU. In the case of small hydropower projects, this is of particular relevance due to their tailor-made nature and the specific local environmental conditions under which they are operated. Given their characteristics (specific location, high impact probability and transboundary relevance, cumulative impacts, etc.), a mere distinction based on the planned electricity generation capacity of the project does not suffice to decide upon whether an environmental impact assessment would be needed. Projects falling below any threshold of “small” hydropower cannot be considered as having a blanket exemption from the obligation to carry out environmental impact assessments.

In a strategic environmental assessment procedure under Directive 2001/42/EC, a screening is required in the following cases:

- plans and programmes using small areas at local level;
- minor modifications to plans and programmes;
- plans and programmes not covered by Article 3(2) of the Directive.

In the case of hydropower projects (regardless of their size), the vast majority of related plans and programmes (energy strategies, renewables action plans, energy and climate plans, hydropower development strategies, land use planning programmes, etc.) would not fall into any of those categories since such plans and programmes would be covering national (energy strategies), regional (hydropower development or river basin management strategies) or larger local (land use planning programmes) areas and an SEA report must be drafted.

Should minor modifications to plans and programmes related to hydropower take place, the criteria for determining the likely significance of the effects of such modifications shall be used, as listed in Annex II of the Directive.

IV.7.2. Scoping

Scoping takes place early in the environmental assessment processes. It provides an opportunity for both developers and the competent authority to determine the key environmental impacts and issues of concern that are likely to be of relevance for the project and eliminates issues that are less of a concern. In other words, scoping defines the EIA report’s content and ensures that the environmental assessment is focused on the project’s most significant effects on the factors listed in Article 3 of the Directive (population, human health, land, soil, water, air, climate, material assets, cultural heritage, landscape and the interaction between these factors as well as the cumulative effect with other planned/existing

projects). With that, it can be ensured that time and money are not spent on unnecessary examinations. It also reduces the likelihood that competent authorities will need to request additional information from developers after the environmental report has been prepared and submitted.⁷⁰

In the case of a small hydropower project, this would mean for instance that when assessing the significant effects on biodiversity of the project, the list of endangered or other species of concern in the area could already be established in the scoping stage, thereby minimising the risk of not considering one or more such species in the EIA report. Also, where possible, it is best practice to include assessment of the significant effects in view of the site's conservation objectives (for species/habitats for which the site is designated).⁷¹

Scoping can take two forms: voluntary and mandatory. Voluntary scoping means that the competent authority issues a scoping opinion upon the request of the developer, while in the case of mandatory scoping, the procedure is triggered automatically. According to Directive 2011/92/EU,⁷² voluntary scoping is a minimum, while the transposing legislation may also provide a mandatory scoping regime.

Voluntary or mandatory, it is important that scoping takes place at an early stage of the EIA process and that it continues afterwards in the light of new information that may become only available at later stages. The scoping report should be flexible enough to accommodate such changes that may become necessary later on.

In case of small hydropower projects, the scoping report shall take particular account of, inter alia, the following elements:

- maps and photographs showing the location of the project relative to surrounding physical, natural, and man-made features, e.g. a water catchment area with any relevant national border (in order to assess potential transboundary impact);
- existing uses of land and water on and adjacent to the site (for instance for agriculture and/or animal husbandry) and any future planned land or water uses;
- information on protected and/or environmentally sensitive areas (information should be provided for different yearly seasons), with particular regard to aquatic habitats and wetlands;
- details of any alternative locations considered;
- a brief description of the project's likely impacts, their nature (e.g. permanent or temporary changes in water flows), extent (geographical area, size of the affected population/habitat/species), magnitude, probability and reversibility.

In the case of strategic environmental assessments, scoping is always mandatory based on Article 5(2) of Directive 2001/42/EC.

IV.7.3. The environmental report

As also stipulated by point g) Article 1(2) of Directive 2011/92/EU (the definition of environmental impact assessment), the environmental report is at the center of the process. It is indispensable that developers of projects ensure that the quality of this document is sufficient to identify and to mitigate the environmental impacts of the projects subject to its scope. The environmental report is the main document based on which the competent

⁷⁰ DG Environment, *Environmental Impact Assessment of Projects, Guidance on Scoping (Directive 2011/92/EU as amended by 2014/52/EU)*, p. 23.

⁷¹ DG Environment, *Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, p.12.

⁷² First subparagraph of Article 5(2).

authority is able to take an informed decision on the matter whether to issue development consent to the project. Furthermore, it also serves as the basis for public participation.

Annex IV of Directive 2011/92/EU defines the different categories of environmental information, which the environmental report has to address. In this respect, the report shall cover the areas listed below in Table 7 as a minimum. This table also provides practical examples of what should be considered in the case of small hydropower projects for each of the categories listed in Annex IV of the Directive.

Table 7 – Information to be provided by the environmental report	
Categories in Annex IV	Examples in the case of a small HPP project
Detailed description of the project - point (1) of Annex IV to Directive 2011/92/EU	<ul style="list-style-type: none"> - <i>Description of the location</i> – The very first stage in the development of a small HPP is proper mapping and siting. Developers shall promote the integration of environmental considerations already at a phase of feasibility studies and detailed designs. The environmental report has to provide detailed description of the geographical, geomorphological and aquatic conditions of the planned site. - <i>Description of the physical characteristics of the project</i> – The environmental report has to describe the design elements of the project (type and size, generation capacity and efficiency, safety and access, technical documentation of the planned technology) in detail. - <i>Description of the main characteristics of the operational phase of the project</i> – The environmental report has to describe the expected diversion or alteration of water flows, the foreseen impacts of the operation of transmission lines and access roads to the small HPP project. - <i>An estimate, by type and quantity, of expected residues and emissions</i> – The environmental report has to provide a quantification of the expected residues and emissions both from the construction (e.g. residues and emissions as a result of creating access roads / construction of the mechanical structures necessary for the diversion of the water flow / construction of temporary accommodation for workers on site etc.) and operation phase (e.g. residues and emissions related to permanent constructions and personnel on site / transmission lines) of the project.
Reasonable alternatives to the project - point (2) of Annex IV to Directive 2011/92/EU	<ul style="list-style-type: none"> - <i>Alternative location(s)</i> – The environmental report has to provide information on the different locations considered for the small HPP project (including accompanying facilities and objects such as roads, transmission lines, etc.) by the developer. - <i>Alternative technologies</i> – As described in Chapter II of the present Policy Guidelines, hydropower projects can use different technologies, both in terms of designing the storage facility (if applicable) and the turbine. Developers have to provide information on the alternative technologies considered in the environmental report and a reason for the option chosen. - <i>“Do nothing scenario” or “no project alternative”</i> – This alternative describes what would happen in case the project would not be implemented at all. Since energy strategies or renewable energy action plans do not dictate Contracting

	<p>Parties a specific choice of generation technology (and if they do in certain cases, it does not require the development of individual projects), it would be a useful tool in the assessment of reasonable alternatives at project level.</p>
<p>Baseline scenario – point (3) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - The baseline scenario refers to the description of the “status quo” of environment at the planned location of the project. - The information and findings of the baseline scenario serve as the standard against which the impacts of the project are assessed and upon which preventive, mitigation and compensation measures shall be established by the developer. - In case of small hydropower projects, which are often located in remote and isolated areas with a high level of biodiversity, it is of particular importance that the baseline scenario (taking into account seasonal differences) is established properly so that the reasoned conclusion for development consent of the competent authority is based on solid facts and scientific evidence. For instance, if locally available information of fish stocks in the river concerned is scarce, further research (e.g. one-year monitoring) has to be carried out to establish the baseline scenario. This research must take place before the report is sent for approval to the competent authority.
<p>Description of the environmental factors likely to be effected / Description of the likely significant effects of the project – points (4)-(5) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - The environmental report of a small HPP has to contain information on all the environmental issues related to such projects described in Chapter III above. - The likely significant effects of the project on those factors (e.g. the effects on agriculture by alteration of water flows or on biodiversity by the disturbance of spawning habitats for fish) are also to be included in the report. Also, where possible, it is best practice to include an assessment of the significant effects of the project in view of the site’s conservation objectives (focus on species/habitats for the protection of which the site is designated).
<p>Description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment - point (6) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - Information on models or calculations used to establish the expected significant effects of the project. - References, literature and scientific evidence used for the establishment of the baseline scenario.
<p>Preventive measures for the mitigation of the damages and/or offsetting measures – point (7) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - Preventive measures should be developed in light of the best available technologies and up-to-date good practices (a range of best practices can be used to avoid and/or minimize impacts from hydropower, e.g. rehabilitating and retrofitting existing hydropower dams, re-operating dams and cascades, and adding turbines to non-powered dams, planning for low-impact hydropower development and operation within energy and water management systems.⁷³ - Mitigation and compensation measures shall be considered also when assessing alternatives, both with a view to strengthen the feasibility of projects and to improve the

⁷³ Opperman et al. 2019, p. 26.

	<p>project's design. Both mitigation and compensation measures may influence the choice of alternatives.</p> <ul style="list-style-type: none"> - The environmental report has to address the possibilities to limit the environmental impact on the aquatic system to the minimum via the application of techniques that take into account aquatic habitats associated with feeding and spawning of species, e.g. ensuring project- and site- specific environmental flows, construction of nature-like fish bypasses. - Remedial or compensatory measures consist predominantly of resettlement and monetary compensation. In such cases, the measures have to take into consideration the value of the property affected by the construction and pay fair and justified compensation to the individuals affected.
<p>Description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the project to risks of major accidents and/or disasters which are relevant to the project concerned – point (8) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - Hydropower projects, irrespective of their size, may be subject to flooding risks, while they can also serve as tools to manage those to a certain extent. - Small HPPs, given their typical locations in mountainous areas, are particularly prone to flash floods. The consequences of such events may do significant damage to the equipment installed and have devastating consequences also to the project economy.
<p>Non-technical summary – point (9) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - A short, simplified summary containing the key information of all the above, which is also understandable for the general public. - This summary needs to include the description of the project, the significant effects, mitigation measures, monitoring measures, the baseline and reasonable alternatives, as well as the methods used for the assessment including explanations on any hurdles encountered during the analysis. - It also needs to be concise and engaging enough to enable stakeholders and the public to get a proper sense of the key issues at stake and the proposed way forward. Depending on the project, and the degree of complexity of the environmental issues involved, a non-technical summary of 10 to 30 pages in length is generally considered to be good practice.⁷⁴
<p>A reference list detailing the sources used for the descriptions and assessments included in the report – point (10) of Annex IV to Directive 2011/92/EU</p>	<ul style="list-style-type: none"> - Bibliography and list of references.

Since a large number of hydropower projects are envisaged in the different energy-related plans and programmes prepared by the Contracting Parties, it crucial to note the importance

⁷⁴ European Commission, DG Environment: *Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)*, p. 64.

of proper implementation of Directive 2001/42/EC. Article 5 of that Directive lists the elements that have to be included by the environmental report resulting from the strategic environmental assessment. This report, conducted at the level of plan or programme, has to serve as a reference for the EIA reports prepared later at project level.

IV.7.4. Public participation

One of the most important objectives of Directive 2011/92/EU is to ensure public participation in the decision-making process. Active inclusion of the public in the decision-making process serves two-fold purpose. First, it broadens the scope of achieving correct assessment of the impact of the project on the ecosystem, and second, it removes the “fear-syndrome” for accepting the changes from the public, leading to possible remedy to “not-in-my-backyard” sentiments and through awareness-raising, might lead to a better acceptance of projects. Due to the fact that public participation in environmental matters is regulated at the level of international law by the Aarhus Convention,⁷⁵ considerations throughout this section will be also given to the findings from the implementation reports and guidance developed under that Convention.

Consultations include two main elements:

- informing the consultees; and
- giving consultees, whether the public or public authorities, proper and complete information and time to prepare and participate effectively in the environmental decision-making.⁷⁶

Article 6(2) of Directive 2011/92/EU stipulates that the competent authority has to inform the “public concerned” to ensure their effective engagement in the decision-making process. In the case of small hydropower projects, the directly affected public would encompass of:

- the local population of municipality at the territory of which the project would be located;
- any downstream population directly affected by changes in water flow and/or usage as a consequence of the realisation of the project.

Point (e) of Article 1(2) of Directive 2011/92/EU defines “public concerned” as meaning *“the public affected or likely to be affected by, or having an interest in, the environmental decision-making procedures referred to in Article 2(2). For the purposes of this definition, non-governmental organisations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.”* Guaranteeing legal right of the environmental organizations to be associated as the “public concerned” has crucial importance, for enabling more specialized groups to assist the public with more informed participation. This concept got the full recognition only recently in most Contracting Parties, therefore certain challenges in their implementation still exist. National competent authorities shall take an active role to ensure that the environmental organizations also have full accessibility to the process.

⁷⁵ UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, adopted on 25 June 1998 in the Danish city of Aarhus (Århus). The Convention entered into force on 30 October 2001 and in EU environmental law, it is transposed (among others) by the provisions of Directives 2011/92/EU and 2001/42/EC.

⁷⁶ European Commission, DG Environment: *Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)*, p. 75.

Contracting Parties are obliged to establish a clear, transparent and consistent framework for defining the administrative procedures and time-frames for public participation.⁷⁷ Article 6(3) of the Directive 2011/92/EU provides that the Contracting Parties, via their competent authorities, shall ensure that the following information to be made available to the public concerned:

- any information gathered in the process of drawing up the environmental report in accordance with Article 5;
- in accordance with the national legislation, the main reports and advice issued to the competent authority or authorities at the time when the public concerned is informed.

Article 6(7) of Directive 2011/92/EU requires that the time-frames required for the consultation period shall not be shorter than 30 days.

In this respect, case-law of the Aarhus Convention Compliance Committee provides clearer guidance and stipulates that:

- a total of 90 days, including 45 days to inspect the relevant information and prepare, plus a subsequent 45 days to comment, is sufficient;
- 10 working days, to inspect relevant information and to prepare to participate in decision-making, cannot be considered to be reasonable.⁷⁸

Directive 2011/92/EU also establishes the means whereby the necessary information can be made available to the public concerned.⁷⁹ In order to ensure effective public participation, the information can be made available either electronically and/or through public notices, as well as by other appropriate means. The consideration of “appropriate” means depends on a number of factors, including the location, the demographic structure of the geographical area affected by the project, etc. This is especially true in the case of small hydropower projects, which are often located in remote areas, an aspect that must be taken into account.⁸⁰

Article 6(5) mentions the following means as appropriate examples, which can be used to inform the public about the detailed arrangements about public participation:

- bill posting within a certain radius in the vicinity of the project;
- publication in local newspapers.

The information – along with the more traditional ways of notification – must also be accessible to the public electronically by placing those at a central portal (as a minimum) or easily accessible points of access at the appropriate administrative level. Combining more than one method of dissemination of information is considered as best practice.

The most important result of applying any of the means of notification is the insurance of the proper delivery of the information to the public concerned as soon as the information can reasonably be provided,⁸¹ taking into consideration the factors (level of internet accessibility, the age group of people using modern technologies), through which the information will be most

⁷⁷ UNECE: *The Aarhus Convention - An Implementation Guide*, p. 60.

⁷⁸ European Commission, DG Environment: *Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)*, p. 76.

⁷⁹ Articles 6(2) and 6(5) of Directive 2011/92/EU.

⁸⁰ For instance, the small hydropower installations in Albania (the Contracting Party with the highest share of hydropower in its energy mix) are almost exclusively located in the mountainous regions at the Northern and Eastern part of the country, which are also the least densely populated.

⁸¹ Article 6(2) of Directive 2011/92/EU.

easily and conveniently accessible to them. In this regard, the competent authority shall ensure the delivery of information about the public consultations.

Throughout the public consultation, a widely voiced concern was that public consultations for small hydropower projects are either not taking place or if they do, it is done only to satisfy the legal obligation, without a real intention to get any public opinion. Furthermore, it was claimed several times that in a number of Contracting Parties, the public concerned faces practical problems in participating (locals often do not participate due to lack of information, remoteness of the hearing venue or because it is only advertised online by the competent authority or in print media not accessible locally). Another important issue is the lack of proper and early dissemination of information for small hydropower projects. The public concerned often only becomes aware of the project at later stage, usually when construction starts. This practice is not in line with Directive 2011/92/EU and Aarhus Convention.

In order to safeguard compliance with the provisions of Directive 2011/92/EU, it is therefore a must that national measures transposing the relevant provisions of Articles 6, 8 and 9 of the Directive are implemented in a full and complete manner. The implementation of those provisions have to be fit for the purpose to involve the public concerned to the fullest possible extent in the procedure and shall be tailored case-by-case to facilitate this purpose.

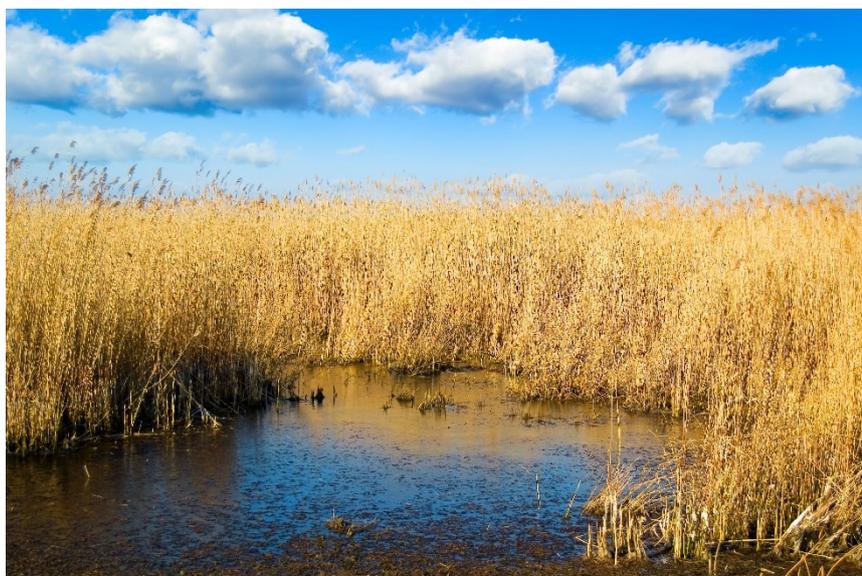
V. Support schemes for small hydropower projects

V.1. State support in the Contracting Parties

In the previous decade, some of the Contracting Parties of the Energy Community have experienced an increased uptake of small hydropower projects mostly as a consequence of very generous support schemes. Even if Contracting Parties are under an obligation to increase their share of energy generated from renewable sources, as presented above, such support was usually set through feed-in tariffs for a period of 10 to 20 years, and in most cases the investment payed off in half that time. The fact that the expected lifetime of a small hydropower plant goes well beyond that timeframe, made these projects even more attractive for developers. This phenomenon results in major market distortions, which was also confirmed by the experiences of stakeholders from various backgrounds participating in the public consultation on the draft of the present Guidelines, organised by the Secretariat.⁸²

At the same time, the cost of renewable energy technologies is decreasing globally. Hydropower projects up to 50 MW can achieve on average competitive installed costs of USD 1500/kW (approx. 1380 EUR/kW), while operation and maintenance (O&M) costs are typically between 1-4% of the annual investment costs.⁸³

As the renewable energy sector matures, policies must be adapted to reflect changing market conditions. Most countries today are switching from administratively set feed-in tariffs to market-based auctions, trying to reach renewables targets in a more cost-effective way. This is accomplished by facilitating competition



among credible renewable energy developers. Consumers benefit through lower costs, while policy makers achieve greater control over the renewable energy sector's development. Auctions can also help to address policy makers' concerns to demonstrate that regulation is ensuring the right level of support for renewable energy and avoiding overcompensation of investors. The ability of auctions to address such concerns, which have sometimes led to renegotiations or retroactive changes, can reduce the regulatory risks faced by investors. Investors also benefit from the transparency provided by well-designed auctions, allowing them to compete on a level playing field. More importantly, auctions design, in combination with, financial, industrial, labour and education policies, can contribute to fulfil broader socio-economic aims. Auctions need to be carefully designed to ensure that projects are delivered.⁸⁴

⁸² Several assessments and analyses on the impacts of feed-in tariffs on small hydropower development were submitted to the Secretariat, providing evidence on the magnitude of the issue.

⁸³ [Renewable Power Generation Costs in 2018](#), IRENA, May 2018.

⁸⁴ Policy Guidelines on Competitive Selection and Support for Renewable Energy, EBRD, Energy Community Secretariat, IRENA, March 2018.

Globally, between January 2017 and December 2018, 500 MW of small hydropower projects were auctioned, leading to a decrease of the levelized cost of energy.⁸⁵ Some of the Energy Community Contracting Parties in the recent years have decreased feed-in tariffs or abolished them altogether (as presented in Table 8 below). While this development is generally welcome and shall continue in the future in order not to provide false incentives for developers, no Contracting Party has conducted auctions for hydropower projects so far.

Table 8 – Overview of support schemes for hydropower in the Energy Community				
Contracting Party	Size of the SHPP (MW)	FiT⁸⁶ (EUR/MWh)		Period (years)
Albania ⁸⁷	Up to 15	50.35		15
Bosnia and Herzegovina				
Federation of BiH ⁸⁸	Up to 0.023	140		12
	0.023 - 0.15	89		
	0.15 – 1	67		
	1 – 10	60		
Republika Srpska ⁸⁹		FiT	FiP⁹⁰	15
	Up to 1	71	26	
	1 -5	59	13	
	1 – 10	57	11	
Georgia	-	-		-
Kosovo ⁹¹	Up to 10	67.47		10
Moldova	-	-		-
Montenegro	-	-		-
North Macedonia ⁹²	Monthly quantity of delivered electricity (kWh)			20
	<=85,000	120		
	>85,000<=170,000	80		
	>170,000<=350,000	60		
	>350,000<=700,000	50		
	>700,000	45		
Serbia ⁹³	up to 0.2	126		Maximum effective running time (h): 5,000 in the year of the incentive period
	0.2-0.5	139.33–66.67*P		
	0.5-1	106		
	1-10	199.44-3.44*P		
	10-30	75		
Ukraine		94.2 – 157.2		

⁸⁵ [Renewable energy auctions: Status and trends beyond price](#), IRENA, December 2019, p. 9.

⁸⁶ Feed-in tariff.

⁸⁷ Law No. 43/2015.

⁸⁸ Decision on calculation of the guaranteed purchase price of electricity from the plant for the use of renewable energy sources and efficient cogeneration, 10.12.2018.

⁸⁹ Decision on the amount of guaranteed purchase prices and premiums for production from renewable energy sources and efficient cogeneration, June 2019.

⁹⁰ Feed-in premium.

⁹¹ Decision to determinate Feed-in Tariffs for generation of electricity from Renewable Energy Sources.

⁹² Decree on support measures for electricity produced from renewable energy sources.

⁹³ Regulation on incentive measures for the production of electricity from renewable sources and from highly efficient combined production of electricity and heat.

V.2. Support measures under State aid scrutiny

In the framework of Energy Community law, it must be ensured that any State support of hydropower projects complies with Article 18 of the Treaty, as interpreted by the European Commission and Union courts as well as with the Guidelines on State aid for environmental protection and energy (EEAG).

Since Article 18 of the Treaty provides for a general prohibition of State aid, any measure which constitutes State aid must be notified to the competent national State aid authority in order to assess its compatibility and can only be granted in case of a positive decision of the authority.

This notification obligation applies for instance to operational aid such as feed-in tariffs or premiums which constitute a selective advantage granted by the State and through State resources liable to distort competition and affect trade. Moreover, any transfer or lease of property and/or land below market price may qualify as State aid and would need to be notified to the State aid authority. Furthermore, granting any right to use land and/or resources such as the water itself, may also qualify as a selective advantage and must be subject to the approval of the State aid authority. Granting access to natural resources without adequate remuneration in line with market rates can constitute a selective advantage financed through State resources (in the form of foregoing revenue).⁹⁴ To ensure that the award of the concession does not involve an economic advantage to the beneficiary, the choice of concessionaire should be a result of an open and non-discriminatory tender procedure gathering a sufficient number of interested operators.⁹⁵ In case of doubt whether a measure constitutes State aid, it is recommended to notify the State aid authority in order to avoid granting unlawful State aid which risks to be recovered later on.

In case of State aid, it is the exclusive competence of the State aid authority to assess whether the aid is compatible with the internal market. This is the case if the aid: 1) contributes to an objective of common interest, 2) is necessary, 3) appropriate, 4) proportionate, 5) transparent, 6) provides an incentive effect and 7) avoids undue negative effects on competition and trade.

Furthermore, specific rules are set forth for different types of aids. In particular, hydropower projects are assessed against the rules on renewable energy sources⁹⁶, with the exception of the electricity produced in pumped storage units from water that has previously been pumped uphill.⁹⁷

With regard to operational aid for renewable energy, the EEAG require that beneficiaries sell their electricity directly in the market, meaning that aid is granted as a premium in addition to the market price and that beneficiaries are subject to standard balancing responsibilities, unless no liquid intra-day markets exist. However, this does not apply to installations with an installed electricity capacity of less than 500 kW or demonstration projects.⁹⁸ To ensure the proportionality of the measure, the EEAG require that aid is granted via a competitive bidding process, on the basis of clear, transparent and non-discriminatory criteria. Again, no such process is required in case of installations with an installed electricity capacity of less than 1

⁹⁴ Commission Decision (EU) 2017/1592 of 15 May 2017 on the measure SA.35429 — 2017/C (ex 2013/NN) implemented by Portugal for the extension of use of public water resources for hydro-electricity generation C/2017/3110, paragraph 49.

⁹⁵ Ibid, paragraph 25.

⁹⁶ Section 3.3 of the Guidelines on State aid for environmental protection and energy 2014-2020

⁹⁷ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

⁹⁸ EEAG 2014-2020, paragraphs 124-125.

MW or to demonstration projects.⁹⁹ These requirements aim at integrating renewable energy into the market and permitting State intervention while limiting the distortions of competition to the extent necessary.

Finally, the EEAG specifies that environmentally harmful subsidies should be phased out. Therefore, when granting aid for hydropower projects, the Water Framework Directive¹⁰⁰ must be respected, and in particular Article 4(7) thereof, which lays down criteria in relation to allowing new modifications of bodies of water, due to possible negative impacts on water systems and biodiversity.

⁹⁹ EEAG 2014-2020, paragraph 127.

¹⁰⁰ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ([OJ L 327, 22.12.2000, p. 1](#)).

VI. Role of the institutions of the Energy Community to ensure compliance with the *acquis communautaire*

According to the institutional framework of the Energy Community established by the Treaty, the highest decision-making body is the Ministerial Council, which meets annually and sets its course of action by providing general policy guidelines, taking measures,¹⁰¹ adopting procedural acts and new legislation or updating the existing one.¹⁰² The Energy Community Secretariat is an independent body under Article 67 of the Treaty, assisting the other institutions, performing day-to-day work and assisting Contracting Parties with the transposition and implementation of Energy Community *acquis communautaire*.

VI.1. Monitoring

The Energy Community Secretariat has the competence to supervise the process of transposition of the legal obligations under Energy Community law into national legislation. Furthermore, the Secretariat assists Contracting Parties with the process of transposing and implementing the laws and policies.

The findings of the Secretariat on the progress of Contracting Parties towards their obligations under the Energy Community Treaty are presented in the Annual Implementation Report issued under point (b) of Article 67 of the Treaty.¹⁰³

VI.2 The dispute settlement mechanism

With the purpose of ensuring the implementation obligations of Contracting Parties under the Energy Community Treaty, a dispute settlement procedure is in place.¹⁰⁴ Article 90 of the Treaty lists the bodies which can initiate the dispute settlement procedure. The matter may be brought to attention of Ministerial Council through submitting a Reasoned Request by any of the Contracting Parties, the Secretariat or the Regulatory Board. Furthermore, the same article stipulates that private bodies may approach the Secretariat with complaints, pointing to a breach of a Contracting Party in implementing one or more of its obligations arising from the Treaty. This tool is widely used in relation to the environmental obligations of the Contracting Parties.

Following the submission of a complaint to the Secretariat, an independent assessment of the matter raised in the complaint has to be carried out. In case an infringement of the obligation concerned is confirmed, a dispute settlement case is launched which ultimately can be referred to the attention of the Ministerial Council. The steps prior to a Reasoned Request are the Opening Letter and the Reasoned Opinion. Contracting Parties have an opportunity to respond at any of the instances and based on the reply, the Secretariat may decide at any point not to proceed with the case any further.

¹⁰¹ According to Article 76 of the Treaty, Measures under Energy Community law can take form of legally binding Decisions and non-binding Recommendations.

¹⁰² Article 47 of the Treaty Establishing the Energy Community.

¹⁰³ The latest Annual Implementation Report can be accessed at <https://energy-community.org/implementation/IR2019.html>.

¹⁰⁴ The Energy Community dispute settlement procedure is regulated by Procedural Act 2008/01/MC-EnC on Rules of Procedure for dispute settlement under Treaty as amended by Procedural Act 2015/04/MC-EnC on amending Rules of Procedure for dispute settlement.

The procedure can either result in actions of the Contracting Party concerned ensuring compliance with its obligations during the preliminary procedure, or in a Decision of the Ministerial Council confirming non-compliance under Article 91 of the Treaty. A case is closed when a Party complies with its obligations under the Energy Community Treaty either prior to sending of an Opening Letter or at any time after dispute settlement procedure has been initiated. A case under Article 91 of the Treaty is also closed with or without compliance with



the adoption of a Decision of the Ministerial Council.

In case the breach identified by the Ministerial Council has not been rectified by the party to the case, or in other cases of a serious and persistent breach of Energy Community law, a Party, the Secretariat

or the Regulatory Board may request a decision of the Ministerial Council under Article 92 of the Treaty. Non-compliance with a decision under Article 92 may incur suspension of certain rights of the Contracting Party concerned, covering but not limited to a suspension of voting and attendance rights at institutions of the Energy Community.

VI.3. Mediation

The Energy Community Secretariat's Dispute Resolution and Negotiation Centre was established as a response to signals that the settlement alternatives currently available for disputes under the Energy Community Treaty no longer respond to the needs of national authorities and stakeholders, in particular small and medium-sized enterprises and consumers.

Pursuant to Procedural Act 2018/05-EnC, the Centre focuses on three pillars:

- negotiations and mediation of investor-state disputes;
- facilitation for the swift closure of dispute settlement cases under the Energy Community Treaty, and
- negotiation support to national authorities in their negotiations with private parties.

VII. Guidelines

Based on the above considerations, the Energy Community Secretariat requests the Contracting Parties the following:

- When assessing environmental and energy aid offered to small hydro power plants authorities have to follow the European Commission's Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG). In line with the EEAG's provisions, environmentally harmful subsidies shall be phased out.
- A mere distinction based on the planned electricity generation capacity of a hydropower project does not suffice to decide upon whether an environmental impact assessment would be needed. Projects falling below any threshold of "small" hydropower cannot be considered as having a blanket exemption from the obligation to carry out environmental impact assessments or to screen the potential impacts as a minimum.
- Plans and programmes, upon which projects requiring an environmental impact assessment would be developed, require a strategic environmental assessment. In the case of the development of (both small and large) hydropower projects, this would be applicable for plans and programmes such as energy strategies, river basin management plans or other strategic documents related to water use and management, documents related to land use or spatial planning, etc.
- Quality control of environmental impact assessment reports have to be significantly improved and carried out in a systematic manner. When carrying out the revision of reports, competent authorities of the Contracting Parties have to pay particular attention to the criteria described in Chapter III and Point IV.7 of the present Policy Guidelines. Particular attention shall be given to the cumulative and/or transboundary impacts to projects, which are often not being assessed at all.
- When assessing the significant effects on biodiversity of a project, plan or programme, the list of endangered or other species of concern in the area could already be established in the scoping stage, thereby minimising the risk of not considering one or more such species in the environmental report. Where possible, it is best practice to include an assessment of the significant effects in view of the site's conservation objectives (for the species/habitats for which the site is designated).
- Involvement of the public concerned has to be ensured throughout the process, both at strategic and project level. Appropriate means for access to justice has to be ensured.

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