



Technical support for RES policy development and implementation – Simplification of permission and administrative procedures for RES installations (RES Simplify)



Iceland

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Executive summary

Geothermal is the single most important energy source in Iceland: it accounts for over 60% of the country's total energy consumption (NEA, 2019). This has not always been the case: until the 1970s oil crisis, Iceland largely relied on imported fossil fuels for energy. The crisis made the small Atlantic island aware of fossil fuel prices, unreliability of exports, and pollution, and Iceland began to rely on domestic energy sources: first hydropower, and from the 1990's, largely geothermal (Logadóttir, n.d; Worland, 2017; Van Campen and Petursdóttir, 2016).

This report focuses on the features of the permitting framework that are specific for renewable energy installations, especially for geothermal energy. The elements that are more or less the same for all industrial-level projects, such as building permits, are not covered to large extent. The emphasis lies on highlighting the unique features of geothermal permitting, which Iceland has considerable experience in.

Undoubtedly, Iceland is sitting on an unmatched natural resource: highly active geothermal fields. But the mere existence of this resource does not translate to the recent triumph of geothermal in the country: the increase of geothermal in the Icelandic energy mix is also a result of political will, innovation, public approval, and efficient administrative procedures.

In Iceland, the administration of hydrological and geothermal resources is allocated to the National Energy Authority/Orkustofnun (NEA), which is a government agency operating under the Ministry of Industries and Innovation. The NEA serves several essential functions as a one-stop-shop when it comes to geothermal permitting: it issues permits for exploration and utilisation of geothermal resources, is responsible for the follow-up and monitoring of existing permits, and produces statistics, information and recommendations on energy use, as well as publishing guarantee of origin system data. As a one-stop-shop, NEA is in possession of a comprehensive, long-term understanding of Iceland's geothermal projects, which results in efficient and informed permitting and monitoring of existing permits.

The Icelandic legislation also offers some advantages and flexibilities for permitting geothermal energy. Firstly, the ownership of the land is translated to the ownership to the geothermal resource under it. The legislation, however, allows for the expropriation of an important geothermal resource from the landowner in rare cases when necessary. Secondly, the permitting process is subject to several public participation and transparency mechanisms, which advances public acceptance of projects and enhances cooperation between stakeholders.

The Icelandic geothermal industry is booming, and the country plans on expanding the use of geothermal energy further (Petursdottir and Van Campen, 2016). However, Iceland's geothermal expansion and the well-functioning permitting framework do not only benefit Iceland in the long run, but can serve as valuable examples for other states wishing to increase the share of geothermal in their energy mix. Several EU Member States are currently exploring the option, for example, Finland.

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1. National RES targets and relevant RES technologies

The main instrument for determining the Icelandic contribution to the Paris Agreement and the EU Effort Sharing sector goals is the Climate Action Plan. The newest version from 2020 states that Iceland aims at reducing its emissions by at least 35%. The reduction may reach 40–46% if additional, currently planned measures are adopted. The document does not determine what the exact reductions in the RES-E and RES-H sectors would be, but it lists the measures used to cut energy sector emissions. As Iceland has already reached virtually emissions-free electricity and heating, it is moving on to applying carbon capture and storage technologies on the remaining emissions of geothermal plants and focus on de-carbonising its transport sector (Iceland's Climate Action Plan, 2020).

This report will cover the licensing of geothermal power plants in Iceland, both for electricity and heating production as the same installation often produces both in the country.

Geothermal is the single most important Icelandic energy source: it accounts for approximately 60% of final energy consumption, including all sectors. Almost 90% of all space heating is powered by geothermal, as well as 31% of Icelandic electricity production. The earliest geothermal installations became operational in the 1940s, but during the last two decades, geothermal has become the dominant source for heating and a significant electricity source, effectively replacing fossil fuels such as coal and oil, and supplementing hydropower. Today, Iceland is fully self-sufficient when it comes to energy-production (Orkustofnun, 2019).

Iceland's vastly increased energy production and demand do not only stem from the needs of the local population, but is the result of a determined economic policy attracting high-energy industries to the island (Logadóttir, n.d). Today, numerous aluminium smelters and data centers consume affordable, abundant Icelandic energy, and their numbers are still growing. The Icelandic electricity production grew by 1.700% between years 1990 and 2014 (Worland, 2017).

2. Administrative and grid connection procedure

2.1. Relevant process steps

In Iceland, the landowner is in possession of the geothermal resource located under the land. For exploring a geothermal resource for potential utilisation, it is necessary to obtain an exploration permit from the National Energy Authority, NEA, a government agency under the auspices of the Ministry of Industries and Innovation. Since the late 1990s, the Icelandic government has been trying to coordinate geothermal and hydropower construction on a national level by developing a Master Plan instrument.

All large-scale RES-H and RES-E installations and plants are required to acquire a power plant license. The applications are processed and existing licenses monitored centrally by the NEA.

In the administrative authorisation phase, the geothermal plant/installation undergoes an EIA (Environmental Impact Assessment) screening if deemed necessary. Furthermore, the geothermal plant/installation will have to acquire the license for resource utilisation, which is granted by the NEA. In addition, the geothermal plants and installations are required to obtain development and building permits, which are not covered in this report.

Iceland is a member of the EU Guarantee of Origin RES-E certification system. The certificates are granted by the Icelandic TSO, Landsnet.

2.1.1. Site selection

Process flow

As a rule of thumb, according to Icelandic legislation, the ownership of resources inside the ground, such as access to a geothermal field, is connected to land ownership (art. 3 Ground Resources Act). If the land is in private ownership, the private entity is entitled to the geothermal resource, and if the land is in public ownership, the state is in possession of the rights to ground resources. Although the owner of the land has the primary access to underground resources, researching and using underground resources requires necessary licenses. This sub-chapter describes the necessary licensing or administrative tools related to the site-selection phase of the project. For the administrative authorisation of a geothermal project, see section 2.1.3.

Exploration license

The NEA is the competent authority granting exploration licenses. The NEA can grant an exploration license to a party (i.e., a person or a company) to search for a resource, such as a geothermal field, in a specific area. Exploration licenses are applicable to investigations on both private and public land (art. 4 Ground Resources Act).

The NEA will gather written opinions from key stakeholders prior to granting the license. Such parties include, for example, the Environmental Agency, Nature Conservation Agency, and the Icelandic Institute of Natural History (NEA expert, 2021). The landowner, too, is entitled to submitting their opinion to NEA in writing. The NEA is not

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obliged to take these opinions into account in their decision-making (Petursdottir and Van Campen, 2016).

If the landowner wishes to survey their own land area for geothermal (or other ground) resources, they are not subject to the exploration license but instead, are required to submit a description of planned surveying activities to the NEA (art. 4 Ground Resources Act).

It is important to note that an exploration license is not necessary in order to explore a geothermal field, but having one serves as a guarantee for the developer that they are the only party conducting an exploration in the area. It is possible to grant the license to more than two parties if they are working together (art. 5 Ground Resources Act).

There is no maximum duration limit to the exploration license, but normally, the licenses are granted for 1-15 years. The interviewed expert considers 3–10 years as the most common license time (NEA expert, 2021). The license holder is obliged to provide the NEA with an annual report on their exploration and drilling activities and key findings (BBA database, 2018).

Master Plan

The Icelandic Master Plan for Nature Protection and Energy Utilisation (Master Plan) is a relatively new, political and legal land use tool to join the interests of nature protection and energy development on a national scale. The Master Plan steers the development of all potential hydropower and geothermal energy projects by examining their potential environmental impacts and economic feasibility. The aim of the Master Plan is to identify the projects with the most potential to be developed, considering the possible impacts they would have on the local environment, economy and livelihoods, such as agriculture or tourism.

The Icelandic government decided to implement the Master Plan approach in 1997 in order to steer hydropower and geothermal development in Iceland more centrally. Since the 1990s, there has been an increasing pressure in Iceland to realise energy generation projects in a more ecologically sensitive way, and the Master Plan is a continuation to developing more holistic, sustainable renewable energy development in the country (Steingrímsson et al., 2008).

At the beginning, the authorities opened a call for submission of project proposals that would be evaluated by the Steering Committee. The total number of projects was so high (approx. 100) that it became evident that the Master Plan would be developed in phases. Working groups were allocated to examine different aspects of the potential projects. There was, for example, a working group for Nature, environment and cultural heritage, and another for Social and economic impact and regional development (Steingrímsson et al., 2008). During the first phase, 43 potential projects were evaluated, stressing the environmental impact of the project most heavily in the assessment. The phase 1 of the Master Plan development took place in years 1999–2003 (Steingrímsson et al., 2008; Rammaáaetlun, 2017).

Phase 2 began in 2004 and was concluded in 2011, producing a further number of evaluations of proposed projects. The phase 3 took place under a new legal instrument, the Master Plan Act, and it focused on 26 projects that were not appropriately categorised in the phase 2 (Rammaáaetlun, 2021a).

The initial impact assessments conducted in the Master Plan does not equal to an EIA but serves as preliminary evaluation based on which the most viable projects are decided on (Steingrímsson et al., 2008).

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According to the preface of the Master Plan Act, the Ministry for the Environment and National Resources is the authority responsible for the administration of the Act. The NEA serves as the administrative body receiving the power plant proposals. The Act includes the division of the proposals into three categories based on the initial evaluation: energy utilisation (suitable for energy production), on hold (further information needed to categorise later) and protection (should not be constructed) (art. 4-6).

The projects classified as energy utilisation category still need to apply for the necessary permits; the Master Plan categorisation serves only as a guideline and not as authorisation.

Deadlines

Exploration license

The NEA can grant 'assurances of precedence to a utilisation license for up to two years from the expiry of the prospecting (exploration) license', which means that the right to the utilisation license (see section 2.1.3.) is reserved to the holder of the exploration license for a determined period of time (art. 4-5 Ground Resources Act).

Identified good practice

The intention behind the Master Plan. The categorisation of all possible geothermal and hydropower projects centrally in the Master Plan procedure ensures a centralised and holistic overview of renewable energy development in Iceland. The idea for the Master Plan originates from the Norwegian approach to renewable energy permitting, which looks at the ecological and financial interests of a project separately first, and reconciling and comparing the advantages and disadvantages of both at the end of the process (Petursdottir and Van Campen, 2016).

Even though the preliminary work of the working groups evaluating different aspects of the proposed projects do not serve as an EIA or another impact assessment procedure, they shed light to what kind of assessment will be necessary later on when the project has proceeded to the administrative authorisation phase. The preliminary assessment also enables the development of the most environmentally and financially feasible projects, and the elimination of the most controversial projects already prior to attempting to get administrative authorisation to them saves both the developers and the administration time and other resources.

The Master Plan Act also includes elements of civil society participation (art. 10). Firstly, the steering committee opens the draft proposal for comments from relevant stakeholders, such as different agencies and authorities and organisations. The proposal is also published for the wider public's feedback for at least 12 weeks (art. 10). Both of these mechanisms take place before the draft is presented to the Icelandic Parliament.

The interviewed NEA expert considers the concept of a comprehensive, national mapping tool as very useful but in reality, the Master Plan has not functioned as it was intended. The development has not delivered results the way it was supposed to. The Plan was to be amended every four years, but it has not been discussed in the Icelandic parliament since 2013. The work on the instrument continues (NEA expert, 2021).

Wide landowner's rights. Unlike in many other countries, in Iceland, the ownership of land and the resource connected to it – in this case, the geothermal field – are interconnected. The person who owns the land also owns the resource (art. 3 Ground Resources Act). The interviewed NEA expert regards this as a positive aspect as the

process of appropriating the resource would be a lengthier procedure if the resource was state-owned (NEA expert, 2021).

The Ground Resources Act also determines the term 'geothermal energy', which sets a legal basis for all geothermal activities carried out in Iceland and reduces disagreements about different actors' rights and obligations in geothermal projects (art. 2 Ground Resources Act).

Well-functioning features of the exploration license. As the exploration license is only granted to one actor in a designated area, it gives the license holder a 'head start' to start surveying the area. The exploration license comes with responsibilities: the license holder is under the annual reporting requirement, which the interviewed NEA expert considers as effective surveillance. If the license is used not in line with the license conditions, the license holder can be fined or even have their license revoked. All in all, the expert considers the high number of applied and granted exploration licenses as positive as the development signals at a functional licensing system and high interest in the Icelandic geothermal resources (NEA expert, 2021).

2.1.2. Electricity production licence

Process flow

Power plant license

The power plant license is granted by NEA and it is necessary for all electricity-producing power plants (art. 4 Electricity Act). The license can only be granted to "independent legal and taxable" operators (art. 5 Electricity Act).

The license is applied for from the NEA, and it is processed in a similar manner as other NEA-granted, licenses, too (see sections 2.1.1 and 2.1.3). A license can only be granted if the project has already undergone an EIA (if necessary) and the project is in line with the local zoning plan (BBA database, 2018).

The licensee is subject to paying a fee, which consists of two parts: EUR 66,18 (ISK 10.000) fixed charge and additional EUR 66,18 (ISK 10.000)¹ for each MW of capacity (art. 33 Electricity Act). Before constructing the power plant or installation, the licensee has to enter into agreement with the landowner regarding financial compensation (art. 4 Electricity Act).

The license will determine the conditions for electricity production in the power plant at hand, for example, its capacity, safety and environmental measures, the obligation to report to NEA, and a decommissioning protocol for when the power plant will cease to be operational (art. 6 Electricity Act). Thus, there is no need for a separate decommissioning permit.

There is no maximum duration for a power plant license. However, it will expire if the development of the power plant has not begun in 10 years of issuing the license, or in 15 years if the power plant has been built but has not become operational. Similarly, the license can be revoked if the licensee fails to enter into agreement with the landowner regarding the compensation on the use of the land and the geothermal resource within 90 days of granting the license (BBA database, 2018; art. 5 Electricity Act).

¹ Exchange rate from 17.5.2021.

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In Iceland, the power plant license also functions as a grid connection permit. A new geothermal installation cannot be connected to the electricity grid before it has received the electricity production license (art. 4 Electricity Act).

All electricity-generating power plants are required to report their production annually to NEA (NEA, n.d.a). A geothermal plant producing both heat and electricity shall 'keep its accounts for the generation of electricity separate from accounts relating to other generation' (art. 7 Electricity Act). The separation is required in order to avoid cross-subsidisation (NEA, n.d.a).

Small-scale devices

Electricity-producing installations with a maximum capacity of 1 MW are not subject to the licensing requirement. They are, however, obliged to notify the NEA if the energy they produce is fed into the grid (art. 4 Electricity Act).

Deadlines

Power plant license

All license applications regulated by the Electricity Act, including the power plant license, are made public in order for all interested parties to submit their opinions about it for a period of four weeks. Comments from consulted parties, such as municipalities, are expected to be submitted to NEA in two months (art. 34 Electricity Act).

If the licensee and the landowner have not entered into an agreement regarding the compensation to the landowner within 90 days of issuing the license, the license will be revoked (art. 4 Electricity Act).

The legal framework does not determine the maximum duration of the power plant license (BBA database, 2018). However, the license will expire after 10 years of issuing if the licensee has not 'begun development in such time' and similarly, after 15 years if the power plant or installation 'has not been taken into operation'. In order to avoid the cancellation of the license, the developer can apply for the extension from the Minister of Industries and Innovation (art. 4 Electricity Act).

Identified good practice

No good practise was identified in connection with this process step only. The overall positive evaluation of the NEA permitting framework is provided in section 2.1.3.

2.1.3. Administrative authorisation

Process flow

Utilisation/exploitation license

The Chapter IV of the Ground Resources Act contains provisions regulating the utilisation licenses necessary to operate a geothermal energy installation/plant. The utilisation of ground resources, such as geothermal energy, is subject to a utilisation license (art 6). Only persons with an Icelandic or EEA nationality have the right to the utilisation of Icelandic ground resources (BBA database, 2018).

The Act identifies the NEA as the competent authority for issuing utilisation licenses. The landowner does not have priority to a utilisation license in their own lands, unless they already hold an exploration license (NEA, n.d.a). The license holder has to be in agreement with the landowner (private or public) before beginning the extraction of the

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ground resource – otherwise, the license can be cancelled (art 7). This obligation also applies to public land.

Before granting the license, the NEA will obtain written opinions of the Ministry of the Environment, the Icelandic Institute of Natural History and the Marine and Freshwater Research Institute, as needed (art 6). The opinion of the relevant local government shall also be sought (art. 6). Judicial precedence also grants the landowner the opportunity to submit a written comment (Petursdottir and Van Campen, 2016). The NEA is not obliged to take the opinions into account in their licensing decision-making.

Having an exploration license to the area does not imply at having a priority position to obtaining a utilisation license to the same area: granting the utilisation license functions according to the 'first come first serve' principle (Petursdottir and Van Campen, 2016).

The license contains conditions on, for example, the term of the license, the geographical boundaries of the area, safety and environmental measures, monitoring plans, and the future decommissioning plans (art 18).

The NEA is responsible for the monitoring of geothermal licenses and protection of the affected areas (Chapter IX art. 21-27 Ground Resources Act).

In case of non-compliance with the conditions of the utilisation license, the license holder will receive a warning from the Minister. If the license holder does not comply with the warning, their license can be revoked (art. 20).

Utilisation licenses can be granted for a time period of up to 65 years (Petursdottir and Van Campen, 2016; BBA Database, 2018). The license holder is obliged to report annually to the NEA about the extracted resource as well as provide information about the activities carried out, especially drilling (BBA database, 2018).

Small-scale installations

According to the Ground Resources Act, small geothermal installations up to 3,5 MW are not subject to the utilisation license, given that they are operated by the landowner for self-consumption for specific purposes, such as heating or agricultural use (art. 10). However, the landowner must notify the NEA of proposed major interferences with the natural resource, such as drilling (BBA database, 2018). This does not include the use of geothermal energy for electricity production, which is regulated by the Electricity Act (see section 2.1.2.).

Environmental Impact Assessment (EIA)

The EIA Act sets the framework for environmental impact assessments in Iceland. The competent authority for the EIA procedure is the National Planning Agency (NPA).

Projects listed in Annex 1 of the EIA Act are always subject to an EIA screening. Projects listed in Annex 2 are subject to an EIA if they 'could have significant environmental effects due to their scope, nature or location' (art. 6 EIA Act). Therefore, Annex 2 project developers are required to notify the NPA prior to utilising the resource, in this case, the geothermal field. The notification must contain detailed project plan and scope and its assumed impacts on the environment (BBA database, 2018). The NPA will have four weeks to decide whether an EIA screening will be needed (art. 6 EIA Act). However, the Minister for the Environment is entitled to request an EIA screening for a non-Annex project as well, backed up by an NPA opinion (art. 7 EIA Act).

If no EIA is necessary, the project developer can proceed to applying for a utilisation and a development license.

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If the project is deemed as subject to the EIA, the developer is obliged to submit a so-called scoping document to the NPA. The scoping document shall include more detailed information on, i.a., the project plan and its alternatives, and the environmental and social impacts. The consultation document is not only communicated to the NPA but also to different consultation bodies and the general public (art. 8 EIA Act; BBA database, 2018).

The NPA will deliver an opinion on whether the report complies with the criteria set out in the EIA Act and its conclusion on whether the project should be carried out within four weeks of receiving the EIA statement from the developer (art. 11 EIA Act). The NPA's final report shall also set out any conditions or mitigating measures necessary for realising the project. The NPA's opinion is communicated to 'the Minister for the Environment, the developer, the consultation bodies' and all who made comments in the public presentation stage earlier in the process (art. 11 EIA Act). The opinion is also made publicly available.

The project developer is responsible for covering the costs of the EIA screening as well as advertising and publishing it (art. 16 EIA Act).

If the project has not been commenced within 10 years of the initial NPA EIA opinion, the developer must consult the NPA whether the EIA statement must be revised (art. 12 EIA Act). The revision process follows the standard EIA regulations set out in the articles 8–11 of the EIA Act.

Having completed the EIA procedure (if necessary) is a pre-requisite for obtaining a utilisation license and an electricity production license (in case of electricity-producing installations) (Petursdottir and Van Campen, 2016).

Small-scale installations

In general, power plants with a capacity of less than 50 MW are not subject to the EIA procedure. Instead, the Icelandic National Planning Agency will issue an opinion on the project. However, if the project is located in a sensitive area or is risky in nature (such as some deep drillings), an EIA may be necessary for even small installations (Petursdottir and Van Campen, 2016).

Construction Permit/Development permit

These permits are not described in detail in this report as the focus lies on the licenses that are more specifically for power plants or similar projects.

The competent authority for these permits is the municipality/municipalities, in which the project would be located. The project developer submits the application to the municipal planning commission, which considers the application paying attention to whether the project is in line with the local zoning plans, or if they should be changed.

If the project fits the zoning plan and the planning commission is in favour of realising the project, a construction permit can be granted.

Changing the zoning plan is a longer process, which involves consulting other relevant authorities, i.a., the NPA, and possibly conducting an EIA (see above). The detailed zoning process with all its consultations and comment rounds takes a minimum of 17 weeks, but usually significantly more (Invest.is, 2021).

Deadlines

Utilisation license

The utilisation license holder and the land owner need to enter into agreement on compensation of the ground resource expropriation within 60 days of the issue of the license. If they do not, the license shall be cancelled (art. 7 Ground Resources Act).

The license can also be cancelled if the geothermal installation has not been commissioned within three years of issuing the license (art. 7 Ground Resources Act).

EIA screening

After notifying an Annex 2 project to the NPA, the NPA shall issue its decision whether the project will be subject to EIA screening or not within 4 weeks of receiving the notification and all necessary data (art. 6 EIA Act).

If the project is particularly large or difficult, it is possible for the NPA to deviate from the aforementioned deadlines, in consultation with the developer (art. 22 EIA Act).

In case of the revision of an old EIA, the NPA shall make the revised version of the EIA public in media within 2 weeks of taking the decision (art. 12 EIA Act).

Identified good practice

Sustainability criteria. The Ground Resources Act has an in-built sustainability criterion: according to article 25, it is required to undertake extraction 'so as to maximise long-term efficiency'. Iceland has developed a specific sustainability framework for the utilisation of geothermal fields as they can be used in either excessive or sustainable ways. In this case, sustainability does not refer to the emissions of the installation but the use of the field: in excessive use, the field is drained relatively fast, whereas in sustainable use, the field remains operational long-term. The NEA assesses the sustainability of the producer's utilisation plan and only grants licenses to the projects fulfilling the criteria (NEA, n.d.b; NEA expert, 2021).

Wide landowners' rights. The wide landowners' rights are also useful in the administrative authorisation stage of the permitting process. The landowner has the possibility to block a utilisation license already granted to the developer by NEA: if the licensee does not enter into a satisfactory agreement with the landowner on the reimbursement of resource utilisation, the license is cancelled. Another way in which the wide rights result in a smoother permitting process is allowing landowners to appropriate a geothermal field located in their property for certain reasons (i.a., heating or agriculture) with no need for administrative authorisation (art. 10 Ground Resources Act; NEA expert, 2021). This lessens the administrative workload of NEA and is beneficial for small-scale producers as they can save both their time and money.

However, landowners are not in possession of god-like powers over their land: in exceptional cases, it is possible for the licensee to require expropriation of the land from the Ministry of Industries and Innovation (art. 12 Ground Resources Act; NEA expert, 2021). There is legal precedence of revoking landowners' rights but there have to be very valid reasons to do so, i.e., providing water for the community (NEA expert, 2021).

The role of NEA as a non-political one-stop-shop. The NEA operates under the auspices of the Ministry of Industries and Innovation but its director-general is legally responsible for all the licensing decisions taken by NEA. NEA is a non-political entity, whose objective is to function as an expert agency and not only as a license-granting authority. The NEA employees are experts on the utilisation and exploration of the resources in hand, and they aim at producing balanced, informed, sustainable licensing

decisions by examining the applications from several different viewpoints (NEA expert, 2021).

Furthermore, the separation of environmental decision-making from politics is in accordance with the general principles of the Aarhus Convention, which Iceland became a party of in 2011.

As NEA functions as a one-stop-shop for both utilisation and exploration licenses for geothermal installations, it can form a comprehensive and informed picture of the applications submitted for its consideration. It welcomes comments from other government agencies, municipalities or other authorities, and the civil society, which are taken into account while making licensing decisions, but it is under no obligation to comply with the comments and recommendations submitted to it (NEA expert, 2021).

Transparency and access to information. The authorisation procedures, especially the processes undertaken by NEA, have in-built transparency mechanisms, ensuring access to as much information as possible for both stakeholders and the general public. The permit procedures themselves include consultation of stakeholders and general public, and the information on granted licenses is legally required to be published in certain newspapers. The annual license holder reports also become public after 5 years. However, it is possible for the license holder to request the secrecy of the data – but not automatically granted by the NEA (NEA expert, 2021; BBA database, 2018).

2.1.4. Corporate legal fiscal

Process flow

Guarantees of Origin

The RED directive has been implemented into the Icelandic legislation since 2012. It is incorporated into Icelandic legislation as Regulation 757/2012. The guarantee of origin certificate confirms that the electricity is produced with RES and the generation process complies with the regulations on Guarantees of Origin. They are issued by the Icelandic TSO, Landsnet (Landsnet, n.d.).

Deadlines

Companies selling electricity shall inform their electricity users once per year on the source of the electricity, and their generation information is then published on the NEA website (art. 5 Regulation 757/2012). The companies are obliged to retain the aforementioned yearly data for 6 years from issuing it to the NEA (art. 10 Regulation 757/2012).

Identified good practice

NEA as one-stop-shop

Having this responsibility in NEA's hands, enforces, again, NEA's competency as a one-stop-shop and central energy authority. NEA is in possession of the long-term overview of RES production in Iceland (NEA expert, 2021).

3. Use of IT systems

Licenses granted by NEA

It is possible to hand in all the application materials for the NEA licenses (utilisation and exploration licenses) electronically by filling in the application as an Excel sheet, and sending it with all necessary attachments to NEA by email. NEA is currently working on an online application portal. The application processes are carried out digitally to an increasing extent, and currently, it is possible to turn all documents and information in online; no physical mail or visits to NEA are necessary (NEA expert, 2021).

4. Complaint procedure

Exploration and utilisation licenses

All licensing decision based on the Natural Resources Act taken by Orkustofnun (new licenses, revising or revoking existing licenses) are open for appeals, which are filed to the Committee of environment and natural resources. Other administrative decisions can be appealed to the Ministry of Industries and Innovation (Petursdottir and Van Campen, 2016; Orkustofnun, n.d.a).

The appeals committee is an independent body, which benefits public participation rights in Iceland. The appealing process is in line with the Aarhus Convention, which was ratified by Iceland in 2011. The appealing party does not need to be party to the licensing case but it can also be, for example, an NGO if it fulfils certain size-based criteria. The interviewed NEA expert notes that the current appeal framework has resulted in a wave of appeals, causing tedious processes to all parties involved, but that it is important to ensure public participation and access to justice, as well as to make sure licensing decisions are taken on the right grounds for all parties involved (NEA expert, 2021).

EIA Act

A decision taken by NPA to assess whether an Annex 2 project is subject to an EIA (art. 6 EIA Act) can be appealed to the Minister for the Environment. The appeal shall be lodged within one month of the announcement of the NPA's decision (art. 14 EIA Act). The Ministerial appeal is also available for NPA decisions regarding articles 5, 8–10 and 12 (art. 14 EIA Act). Only 'those who have a legal standing relating to the above-mentioned decision' taken by NPA can lodge an appeal. NGO's and other interest groups with at least 30 members registered in Iceland also have an appeal right, given that their purpose is to safeguard public interests (art. 14 EIA Act).

The Minister shall give a ruling on the appeal within 2 months of the deadline for appeals (art. 14 EIA Act). The Minister's ruling cannot be appealed.

References

- BBA database, 2018. Key Components of Legal Framework. [online] Available at: <<http://www.geothermal.bba.is/country/iceland>> [Accessed 22 March 2021].
- Invest.is, 2021. Planning and building. [online] Available at: <https://www.invest.is/doing-business/planning_and_building> [Accessed 27 April 2021].
- Landsnet, n.d. Guarantees of Origin. [online] Available at: <<http://2015.landsnet.is/en/finance/guaranties-of-origin/>> [Accessed 23 April 2021].
- Logadóttir, H. H., n.d. Iceland’s sustainable energy story: a model for the world? [online] Available at: <<https://www.un.org/en/chronicle/article/icelands-sustainable-energy-story-model-world>> [Accessed 22 April 2021].
- National Energy Authority (NEA)/Orkustofnun, 2019. Energy statistics in Iceland 2019. [online] Available at: <<https://orkustofnun.is/gogn/os-onnur-rit/Orkutolur-2019-enska-A-4.pdf>> [Accessed 15 March 2021].
- NEA, n.d.a Legal Framework. [online] Available at: <<https://nea.is/geothermal/legal-and-regulatory-framework/>> [Accessed 15 March 2021].
- NEA, n.d.b Sustainable Utilisation. [online] Available at: <<https://nea.is/geothermal/sustainable-utilization/nr/77>> [Accessed 22 April 2021].
- Petursdottir, H. and Van Campen, B., 2016. Geothermal Sustainability Regulation in Iceland and New Zealand. *European Geothermal Congress 2016 Congress paper*.
- Rammaáaetlun, 2017. The history of the Master Plan. [online] Available at: <<https://www.ramma.is/english/history-and-ideas/history-of-the-master-plan/>> [Accessed 19 March 2021].
- Rammaáaetlun, 2021a. Laws and regulations concerning the Master Plan. [online] Available at: <<https://www.ramma.is/english/general-information/laws-and-regulations>> [Accessed 19 March 2021].
- Steingrímsson, B., Sveinbjörn, B., and Adalsteinsson, H. Master Plan for Geothermal and Hydropower Development in Iceland. Paper presented at the ARGeo C-2 Conference 24–25 November 2008, Entebbe, Uganda.

Legislation

- Electricity Act 65/2003 (Electricity Act).
- Environmental Assessment Act 106/2000 (EIA Act).
- Master Plan Act, 48/2011.
- Act on Planning 123/2010.
- Act on the survey and utilisation of ground resources 57/1998 (Ground Resources Act).
- Regulation on the publication of information related to guarantees of origin of electricity 757/2012 (Regulation 757/2012).

Interviews

- NEA expert, 2021. National Energy Authority/Orkustofnun. Interviewed on 12 April 2021.