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

Hungary

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Executive summary

This report covers all RES-E technologies, since the requirements to authorise a power plant are similar. However, the Government of Hungary's (2020) strong focus in its NECP on deploying solar PV to help the country meet its renewable energy targets entails that most input was sought and provided by solar PV stakeholders. Nonetheless, the administrative processes, procedures, and barriers discussed in the report are broadly applicable to all (renewable) power plants.

A number of administrative barriers weigh on the continued rapid expansion of solar PV in Hungary. Broadly speaking there are three core problems from which a number of barriers derive (1) variegated interpretations of regulations by local authorities, (2) the land-intensive nature of solar PV, and (3) DSOs insufficient adaptation to changing requirements.

Both administrative permits and grid connection-related permitting is heavily divided based on geographies. Provincial Offices tasked with administrative permitting have implemented and interpret national laws and regulations in differing manners. This locality-specific governance offers the benefit of reflecting local needs, but underpins an instable investor environment. A similar problem is in place with the distribution network, which is split into six geographies and different procedures, rules, and regulations apply to each. DSOs have adopted slightly different practices in each and may even change their positions from case to case, contributing to an instable investor environment.

Many problems occur with the site selection, as land on which these expansive power plants can be constructed is increasingly scarce. Developers need to acquire land for their projects, which is frequently agricultural, entailing that it has to be repurposed. The possibility of this varies from locality to locality and, worryingly, introduces an opening for corrupt acts with which developers can push decision-makers to interpret rules in a manner that favors their projects.

Grid permitting is a slow and tedious process that is geared towards cooperation between the developer and the DSO, as opposed to the developer being able to rely on clear cut and transparent processes. Information on grid connection points, decision-making processes, whether or not deadlines will be met are opaque.

Table 1 contains a traffic light assessment of the relevant process steps for the installation of solar photovoltaics and biomass power plants in Hungary.

Table 1: Traffic light assessment of the relevant process steps

Process step	Site selection	Electricity production license	Application preparation process	Administrative authorisation	Grid connection permit	Corporate legal-fiscal	Other
PV ground-mounted							
PV rooftop							
Biomass							

No barriers identified
Minor barriers identified
Severe barriers identified
Moderate barriers identified
Not relevant for target country
No projects implemented

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1. National RES targets and relevant RES technologies

Hungary is planning to increase renewable energy's share of gross energy consumption from 13.3% in 2017 to 21% by 2030 according to the National Energy and Climate Plan (NECP) (Government of Hungary, 2020). Renewables' share in electricity generation is planned to increase from 7.5% in 2017 to 21.3% by 2030. Furthermore, the NECP anticipates renewables' share for heating to increase from 19.6% to 28.7% and in the transportation sector to climb from 6.8% to 16.9% during the 2020–2030 time period.

The rise of renewables' share is expected to be driven by the rapid deployment of solar photovoltaics (PV), the installed capacities of which are planned to grow from 2 GW in 2020 to 6.5 GW by 2030 (Szabó, 2020). This trend would be an extension of solar PV's dynamic expansion in recent years, supported by government subsidies and the technology's rising competitiveness. The support schemes in place have generally been popular with investors and the auctions the government launched were deemed successful. In parallel, solar PVs have been very popular with households as well. The government will seek to facilitate this growth in forthcoming years to allow Hungary to meet EU commitments (Kaderják, 2020). Solar PV is thus by-far the main pillar of Hungary's renewable energy policy and the government has channelled its attention to facilitating the technology's diffusion; albeit, this has primarily been directed at providing subsidies (Szabo et al., 2020). Administrative and procedural barriers remain in place and should be streamlined.

The Government of Hungary's ban on the diffusion of wind power plants is set to be maintained. The NECP expects generation from existing capacities to remain unchanged.

The NECP also suggests that biomass capacities will increase from the just over 0.5 GW expected for 2020 to 0.8 GW by 2030, entailing relatively minor growth.

In Hungary, permitting for power plants takes place according to similar rules; therefore, the identified barriers and issues are applicable to technologies across the board. However, given the government's pro-solar strategy, if action is taken it is likely to be streamlined for solar PV. Household-sized PVs (i.e., installations with an installed capacity below 50kW, essentially rooftop PVs) are subject to simplified permitting procedures, yielding few administrative barriers.

Figure 1 displays the annual deployment of PV and onshore wind between 2010 and 2019. While small deployment of onshore wind took place in 2010 and 2011, there was an increasing trend in solar PV deployment since 2012 with a sharp jump in 2018 and 2018.

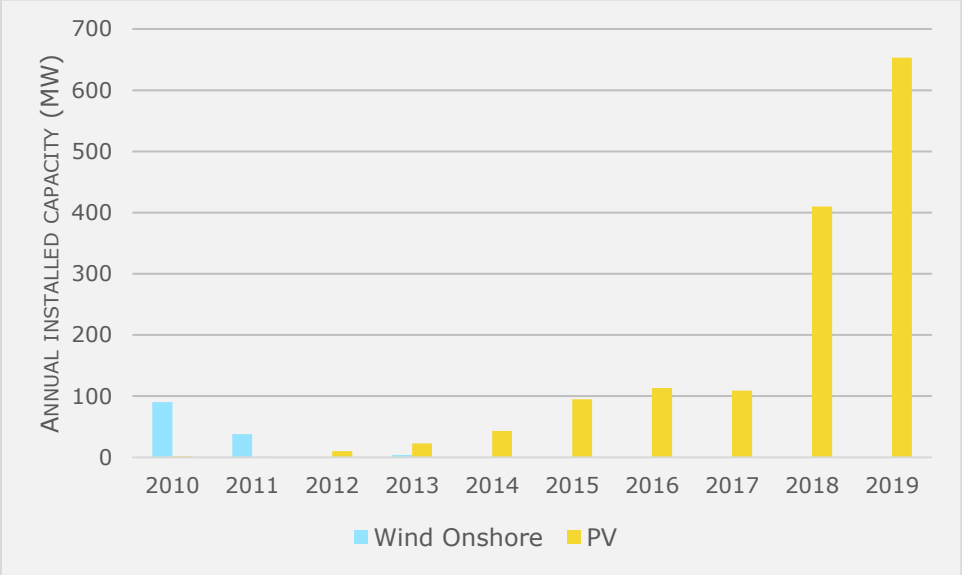

Figure 1: Annual installed capacity of PV and Wind onshore 2010-2019 (source: EurObserv'ER)

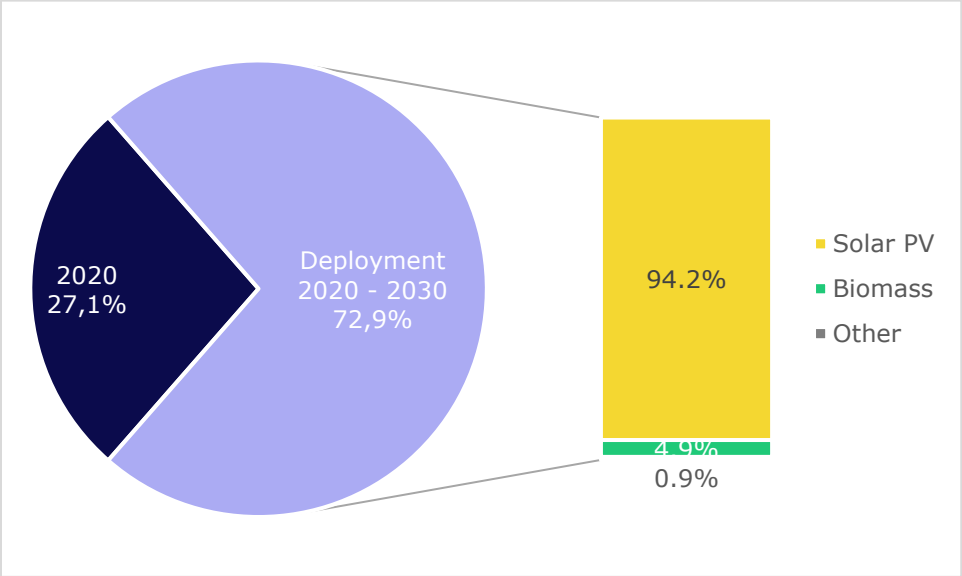

Figure 2: Deployment of RES-E 2020-2030 (source: NECP)

2. Administrative and grid connection procedure

2.1. Relevant process steps

The first step towards the realisation of a renewable energy project is choosing a suitable site, including renting or buying the property where the developer plans to construct the installation. This step also includes concluding preliminary assessments in order to establish whether the site is appropriate for the intended installation and repurposing land. As solar proliferates in the country, this issue can rise in prominence.

'Application preparation' is an initial step, relatively minor step, where the necessary documents are gathered by the developer to launch permitting.

Most permitting is undertaken during the 'Administrative authorisation' and the 'Grid connection permit' processes. These can overlap and run parallel to one-another. During the 'Administrative authorisation' Provincial Offices coordinate the permitting process with relevant technical authorities. Although, to address questions, the developer may have to communicate directly with technical authorities. In parallel, the 'Grid connection permit' is negotiated between the developer and the Distribution System Operator (DSO). This is a relatively tedious process with DSOs frequently requesting further documentation, changes in plans, or investment in the grid infrastructure before greenlighting installation's connection to the grid.

2.1.1. Site selection

Process flow

Construction, operations, launch of operations, continued operations, and decommissioning of power plants have to be approved by the relevant authority (Act No. LXXXVI of 2007). The relevant authority is either the respective Provincial Office – there are a total of ten offices each responsive for a specific geography – or the Budapest Office of the 12th District. Provincial Offices and the Budapest Office of the 12th District oversee a number of smaller, local offices that can take decisions in their geographic jurisdiction (FIR, 2020). Within these offices, typically the Department of Metrology and Technical Safety (*Mérésügyi és Műszaki Biztonsági Osztály*) is responsible for approving construction-related proposals (Government Decree 365/2016. (XI. 29.)).

Site selection precedes all further actions and a decision is taken by the investor considering the particular qualities of the given location. The basic considerations in these cases are generally its proximity to the grid and whether the land can host a power plant or not. Grid-related procedures and barriers are discussed in detail below, in section 2.1.5. 'Grid connection permit'.

Land upon which power plants can be constructed are generally scarce and are frequently protected (Law CXXIX. of 2007). Developers must acquire and have their choice of land repurposed in order to construct a power plant. Land in Hungary is classified according to its quality (Government Decree 47/2017. (IX. 29.)), which influence whether or not in can host a power plant. Repurposing is done by the Land Authority in the respective locality at the request of the developer. Repurposing can be fast-tracked, if the agricultural land is of weak quality and the planned installation has a capacity less than 0.5 MW (Portfolio, 2019).

Household-sized installations (i.e., those with less than 50kW installed capacity, essentially rooftop installations) are exempt from these procedures.

Deadlines

The local office of the authority has to take a decision on the repurposing of a land within 30 days (Kormányablak, 2020a). Certain actors may have a priority purchasing option on the given land that the developer may be looking to repurpose, purchase, or use. Specific provisions on the matter are contained in the Civil Code, but as a rule of thumb require the developer to give option holders 45 days to take a decision (PV Stakeholder 1, 2020).

Detected barriers

Differences in repurposing land. Provincial Offices and their local offices have discretion over their decisions regarding land repurposing. There are only broad

guidelines at the national level (Government Decree 356/2007. (XII. 23.)) for these rules and generally accepted practices, but these are not harmonised and their implementation can vary by location. In addition, these rules may be interpreted along slightly different lines by different offices, introducing instability regarding expected outcomes of procedures. This creates investment risk, since investors may face different hurdles from region to region, despite rules and regulations presumed to being the same. It also allows for corruption, since rules can become malleable this way and some developers resort to corruption to streamline the development of their projects (PV Stakeholder 1, 2, 4, 2020; Czinkóczi, 2020).

High agricultural subsidies. High agricultural subsidies substantially increase the price of land. Acquiring land has become expensive, since many landowners rely on relatively high EU and national subsidies to support their agricultural output. However, this can inflate the price of land. Land, which, in some cases, is not utilised (at all or to the extent possible), but instead serves the purpose to allow landowners to collect subsidies (PV Stakeholder 1, 2, 5, 2020).

Risk of declining credibility. The rising demand for land driven by solar PV installations mushrooming throughout the country has led to a jump in land repurposing. In many cases this does not take into account the environmental damage this may lead to and has frequently been linked to corrupt practices. These may pose a future barrier for solar PV, since it chips away at the credibility of the technology (PV Stakeholder 7, 2020). This is an administrative barrier insofar as it amplifies the problems the 'Differences in repurposing land' may lead to in the future.

A large number of Natura 2000 areas. This is a relatively minor barrier, but there are large Natura 2000 areas in Hungary (Government Decree 269/2007. (X. 18.)) and data regarding their boundaries, use, and governance is not always clear (PV Stakeholder 5, 2020). Environmental Impact Assessments (EIA) need to be carried out in these cases and the Natura 2000 classification of land shapes these requirements, yet they are not always clear for project developers (rescoop, 2014).

Everything is in Hungarian. Hungarian laws, regulations, codes, etc. are generally only available in Hungarian, with little information publicly available in English or other foreign languages (PV Stakeholder 2, 2020). This inhibits the participation of international investors or project developers that do not have a Hungarian subsidy or do not closely cooperate with a Hungarian partner. This can be an even larger problem when dealing with Provincial Offices in rural areas of Hungary, where experts' proficiency in English (or other languages) is poor.

Identified good practice

Local governance. Land repurposing is locally governed, while this has shortcomings, most prominently the various interpretations of laws and regulations (see 'Differences in repurposing land' above), it offers localities to take decisions on matters that directly impact the region (PV Stakeholder 1, 2020). Local governance and the ability to take local needs into consideration offers the opportunity for a more inclusive energy transition.

2.1.2. Application preparation process

Process flow

To launch the permitting process with authorities, the project developer must have an 'Execution Plan' prepared by the electrical engineer assigned to the project. This consists of the DSOs 'technical-economic fact sheet' (see section 2.1.4 'Grid connection permit'), blueprints of the location, the engineering statement, and a technical description (Fenyvesi, 2018). With these documents the developer can then undertake 'utility aligning', which means that via the e-utility (2020) website and in person the developer and engineers can explore how the plant will relate to existing utility infrastructure.

Deadlines

Not applicable.

Detected barriers

Differences in the availability of relevant data. E-utility (2020) is a website that provides relevant information on land and utility infrastructure, which can influence the way in which a developer designs their power plant. Data is not always up-to-date, since those that execute changes that impact utilities would have to update the register, but they do not always do so (PV Stakeholder 5, 6, 2020). This can lead to surprises for renewable power plant developers, as there may be differences in what they presume and what they see when inspecting the site or planning the facilities.

Identified good practice

No good practice related to this process was identified.

2.1.3. Administrative authorisation

Process flow

Administrative authorisation is conducted by the Provincial Office in a one-stop-shop manner. Project developers can submit documentation to the Office and, in theory, not have to deal with other authorities. In these cases, it is the Provincial Office administration that deals with the representatives of the 'Technical Authorities' (General Directorate for Civil Aviation; Hungarian Defence Forces Air Operation Command and Control Centre; Local Notary; National Directorate General for Disaster Management; Ministry of Defence; Environmental Protection, Nature Protection, and Mine Regulatory Department; Plant and Land Protection Directorate; District Mining Inspectorate; and Heritage Protection) (Veres, 2018).

In practice, to speed things along and to provide further input to technical authorities, developers tend to liaise voluntarily before or upon submitting documentation. The goal of this is for developers to be able to readily answer questions, provide additional information, or make amendments to their plans without the project stalling (PV Stakeholder 1, 3, 5, 6, 2020). Other stakeholders are not necessarily involved, unless the technical authorities issue such decisions. For example, when completing an environmental impact assessment, they may convene a public hearing (unless the matter is classified for military or other reasons) (Government Decree 314/2005. (XII. 25.)). In these cases, the public hearing is announced and impacted stakeholders are welcome to participate and provide input, which the authorities should take into consideration.

To obtain necessary administrative authorisation to establish a power plant, developers have to submit an execution plan (includes pertinent documentation of the project), a technical description, and a design statement to the respective Provincial Office (Fenyvesi, 2018). A certificate of ownership for the land is also necessary (not older than three months) or an agreement with the owner of the property that allows the developer to use the real estate (Civil Code should be indicative regarding the form of this contract), a photocopy of the Land Registry's map, and a description of the support system of the installation. The Office has to take a decision within twenty-five days and a positive decision is final fifteen days after the decision has been made (Government Decree No. 382/2007. (XII. 23.)). Generally speaking, authorities are competent, but this can vary based on which Provincial Office the claim is filed in (PV Stakeholder 3, 5, 2020).

In some cases, an administrative authorisation to use a given site does not have to be approved by an authority. These include: power plants that do not have a connection point with over 50 kVA (i.e., those power plants under 50 kW), small power plants with an installed capacity below 0.5 MW that operate in island mode (these exclude installations on conservation areas or Natura 2000 areas). However, these cases are not exempt from abiding by construction regulations (including local laws and regulations) and the national settlement organisation and construction requirements (Government Decree No. 382/2007. (XII. 23.)).

Deadlines

Upon submitting relevant documents to the Provincial Office, the administrative authorisation process is to take place within a maximum of twenty-five days. An accelerated permitting process can be requested, which should take no more than fifteen days (Fenyvesi, 2018). These deadlines apply if the project is approved by all technical authorities involved (the Provincial Office forwards documents to these) without requests for further documentations or other inquiries. However, if technical authorities flag issues then the project can face significant delays. For example, an environmental or archaeological impact assessment takes between six to twelve months (PV Stakeholder 5, 2020). The decision becomes final fifteen days after a project is approved.

A rejection for a permit can be issued by the Provincial Office due to insufficient documentation following submission. The developer can provide missing documentation within five days.

Provincial offices and technical authorities are generally mandated to provide responses to inquiries within fifteen days (Government Decree 531/2017. (XII. 29.)). They tend to meet these deadlines, but multiple inquiries or correspondence can delay the development of projects (PV Stakeholder 2, 2020).

Provincial Offices try to meet deadlines, however are not always able to do so. They are somewhat understaffed and the competencies of staff vary from office to office, adding an element of contingency into the permitting process. On occasion, they will suspend a developer's project, when it is clear that either they cannot meet a deadline or the developer cannot provide the input they had requested in the given timeframe. The latter helps avoid running out of deadlines, which would force the developer to restart the whole permitting process (or large parts of it), but it can also introduce significant delays.

The developer(s) must notify the relevant authority at least fifteen days prior to beginning construction and indicate the expected launch of construction and its

anticipated commencement (Fenyvesi 2018). This has to state the contact details of the Technical Leader and (if available) Technical Supervisor of the project.

Detected barriers

Splintered procedures. Administrative authorisation is governed regionally or locally. This carries the benefit of reflecting local specificities, but it has splintered the interpretation of national laws and regulations. Responsible offices approach and interpret guidelines differently, which leads to a variegated permitting procedure from locality to locality. This fractures the regulatory framework and introduces instability for investors. This also shapes technical authorities' approaches in areas such as heritage protection, where there is a single central codex of rules, but is applied across the board with substantial differences. This concern was noted by all interviewees, but is also described in Fenyvesi (2018).

Everything is in Hungarian. All essential documentation is only available in Hungarian, inhibiting foreign investment. For details, see section 2.1.1. 'Site selection' above.

Codices are not always up-to-date. Construction codices at the local and regional level should be updated every six years, but these updates do not reflect the need to consider the particularities of renewable power plants (PV Stakeholder 5, 2020). This would also be a crucial starting point to allow authorities to familiarise themselves with renewables and develop the competencies necessary to permit such propositions.

Outdated requirements. Some requirements technical authorities request from project developers are outdated or not streamlined to the needs of renewables. For example, the National Directorate General for Disaster Management has similar requirements for solar PV and thermal power plants leading it to require similar approachability to both types of plants (e.g., similarly wide roads) to allow fire fighters to access these areas, even though fire hazards for solar PV power plants are substantially lower than for their thermal counterparts (PV Stakeholder 1, 2020). Another case in point is that some projects are required to provide a 'water bloc' near the power plant, which would be used for employees to wash up, but most renewable power plants (solar and wind) are operated remotely.

Double procedures. In the case of permitting an electric line, the surveyor develops the blueprints for validation by the Land Authority (PV Stakeholder 5, 2020; Fenyvesi, 2018). The Land Authority publishes its validation – frequently after months – which the project developer along with its other necessary documentation submits to the Provincial Office to have the project approved. Then, the Provincial Office submits these documents to technical authorities, which includes the Land Authority, yet again. Thus, the permitting process is prolonged by the need for the Land Authority to evaluate the same documentation twice.

Excessive permissions. Soil protection regulations seem excessive, since the repurposing of land has to be requested when the developer wishes to burry an electric cable. This is puzzling, since the land's use is maintained and the cable runs underground. This prolongs the project's completion by weeks or months and can increase administrative costs by an extra EUR 1,500 (PV Stakeholder 5, 2020).

Difficult to find person responsible for specific issue. In theory, there is a one-stop system where the developer only needs to submit documentation to the Provincial Office (PV Stakeholder 5, 2020). In practice, to explore potential problematic areas and their resolution, project developers seek to liaise with technical authorities in advance to streamline the completion of their project. However, it is very difficult to identify who is

responsible for a given area and how they can be reached. This varies by region, but frequently it takes extensive effort to find the responsible person. There is a similar problem with large stakeholders that may have to be involved, such as Hungarian State Railways (Magyar Államvasutak, MÁV for short).

Incompetent licensing authority. Incompetent licensing authorities can pose a barrier to the licensing process, but it is a barrier that heavily varies based on the Provincial Office (PV Stakeholder 5, 2020). Some are better and some are worse. Generally, it is not an immense impediment, but some Provincial Offices have little to no experience with renewable projects, which makes permitting slower and more tedious. Coordination on the national level would help to enhance the knowledge of all of those working on permitting renewables, but this should be harmonised with local specificities. The barrier has been pointed out by project developers, but there is no clear indication that national actors have acknowledged or taken action to address it.

Quantity of administration. There is little change in the amount of paperwork between projects. A relatively small project – slightly above 0.5 MW – would generally entail a similar amount of paperwork as a large project does. This makes it necessary to invest a disproportionally large amount of resources in small projects, which thus yield lower turnouts deterring investors from taking on such endeavours (PV Stakeholder 2, 2020).

Identified good practice

One-stop shop (sort-of). Investors only have to request an administrative authorisation for their power plant from the Provincial Office, which then forwards this for approval to other relevant authorities. In theory, this offers a quick (sort-of) one-stop-shop model that streamlines procedures for investors. It is not perfect, however, as some investors have experienced that directly reaching out to relevant authorities to speed their application along accelerates an otherwise relatively slow process.

2.1.4. Grid connection permit

Process flow

As a first step, the project developer has to submit a request to the DSO that it wishes to connect a power plant to the grid. Then, the DSO issues a 'technical-economic fact sheet' (*műszaki gazdasági tájékoztató*, MGT for short) that is seen as quasi-binding by some DSOs (e.g. E.ON), while it is seen as merely indicative by others (e.g. NKM). The latter group generally request a feasibility study, which is indicative of how the project can and should be developed, if approved. Those DSOs which understand the technical-economic fact sheet as quasi-binding nonetheless also request the developer to undertake a feasibility study, especially if the grid connection is more complex.

Based on the technical-economic fact sheet, the feasibility study and correspondence with the DSO, the developer can prepare the 'connection plan' (PV Stakeholder 1, 5, 2020). Once the DSO approves the connection plan the two parties sign a 'grid connection contract' prior to the power plant becoming approved for operations.

Household-sized solar PV with an installed capacity of less than 50 kW (dominantly rooftop) permitting is much simpler and only requires the developer to submit a request, which the DSO follows up with a technical inquiry. The contractor of the power plant needs to provide the blueprint for the system and draft a 'connection documentation', which has to be approved by the DSO.

Deadlines

In theory, the DSO should provide a response to the developer's grid connection request within thirty days and it states its position in the technical-economic fact sheet (Fenyvesi, 2018). In practice, these deadlines are not always upheld by the parties; instead, the DSO and the developer engage in a cooperative planning process and negotiations to explore how a compromise can be reached that is beneficial for both parties (PV Stakeholder 5). These discussions can last up to a year. Whether the developer and the DSO uphold the thirty day deadline varies from DSO to DSO.

If the connection point is within 3 km of the land where the project will be constructed, the DSO must provide a line extension free-of-charge. However, it has three years to complete this endeavour, which can lead to significant delays (Fenyvesi, 2018).

The technical-economic fact sheet is valid for a period ranging between three to six months, varying based on the DSO and the relation a developer has already established with the DSO (ELMŰ, 2020a; Fenyvesi, 2018; PV Stakeholder 1, 2020; NKM, 2020). During this period the developer has to prepare the 'Connection Plan', which is valid for two years, if approved by the DSO (or, where necessary, the TSO) (ELMU, 2020a).

The last step is the signing of the 'grid connection contract' after which the power plants can become operational fairly quickly, generally within thirty days (PV Stakeholder 1, 2020).

In the case of household-sized power plants the DSO has thirty days to respond to an inquiry. Subsequently, the developer needs to provide the power plants blueprints within ninety days, which the DSO has to approve (or reject) within fifteen days. The developer then has up to a year to complete the installation, following which the DSO provides a contract with the operators of the household-sized power plant within fifteen days. As a last step, the DSO has to change the meter of the house, which is done according to the agreement the two parties come to. These time intervals and deadlines were based on the data provided by E.ON (2020) and thus may vary from DSO to DSO, but are generally seen as indicative.

Detected barriers

Monopoly position of DSOs. The Hungarian market is split into six regions that are controlled by a number of DSOs each of them wields monopoly over a certain geography (Brückner, 2019). DSOs, however, wield monopoly over each region, which is an overarching barrier that is seen as the root cause of many barriers listed below (PV Stakeholder 3, 2020). This has been a long-standing and widely recognised issue that has impeded grid accessibility, but remains to be addressed. It could be addressed by the Hungarian Energy & Utilities Regulatory Agency.

Different interpretations of national regulation. The rules and procedures of the different DSOs in the geographies they control varies (noted by all interviewees). There are overarching laws and regulations that govern the way in which they must address cases, but there is still room for interpretation. There is a lack of consistency amongst the DSOs, which adds to the risks developers face.

High and/or varying costs for substations. Developers may have to bear the costs of the substation for their project, which they willingly do in some cases, if they still anticipate the project to be profitable. However, substations are deemed costly in a European comparison and may significantly vary from DSO to DSO. The costs of constructing a substation may be up to ten-fold the price in Germany (PV Stakeholder 1,

5, 2020). Price quotes are provided by DSOs, which practice monopoly over certain geographies, leading to the high prices. There are also substantial differences between the price quotes offered by various DSOs. For instance, experience shows that E.ON is much more expensive than ELMŰ-ÉMÁSZ (PV Stakeholder 1, 2020).

A further dimension of this issue is that cost bearing is not split evenly between beneficiaries (PV Stakeholder 5, 6, 2020). The costs of constructing a substation are borne by the project developer who initially needs these additional capacities. However, the substation addition requested by the DSO may allow for others that subsequently decide to develop projects in the vicinity and the DSO to benefit from the initial investment, without having to contribute.

Incompetency and structure of DSOs. Experts and administrators working on permitting grid connections at DSOs were not competent and the way DSOs manage these cases slows down the permitting process (PV Stakeholder 1, 3, 5, 2020). DSOs still extensively rely on a large number of 'old experts' who are well versed in how the grid had functioned when electricity generation was heavily centralised, but they are resistant to adapting infrastructure to meet the needs of increasingly decentralised renewables. The manner in which DSOs are structured further impedes a streamlined permitting process. These entities are set up in a manner where they work more as bureaucracies than flexible private enterprises. Cases frequently involve multiple people from many departments, weighing on the speed of permitting.

Interviewees believed that this barrier was partially a result of the reluctance to change and the monopoly of DSOs. Generally, investors are well aware of the problem, but it has not been widely acknowledged. Some form of competition enhancement by Hungarian Energy & Utilities Regulatory Agency could address the barrier, which could be complemented by educational programmes aimed at teaching and sensitising experts on the changing demands that project developers have towards the grid.

Insufficient information on grid connection points. There is a lack of information and transparency on the availability of grid connection points. Upon making a request for a location, the DSO provides information via the technical-economic fact sheet. This has an indication of the grid connection point that it can provide. However, this may be 20-30 km from the location where the developer planned the construction of the power plant initially (PV Stakeholder 1, 2020). Extending the line cable for such a length is costly (in the hundreds of thousands of euros), which can deter investors from a project, forcing them to look for a new location and restart the process. There is little to no transparency on how the DSO comes to a decision, at best, investors can maintain good relations with DSO employees, which can lead to some sort of compromise (PV Stakeholder 5, 2020).

Grid is nearing saturation. The grid is relatively saturated. It has been developed to transit and distribute centralised modes of electricity generation, making it increasingly difficult for developers to acquire access points to the grid. This was pointed out by essentially all interviewees, but has been a long-known problem (see e.g., Energiaklub, 2015). Essentially, grid development is a lagging by five to six years (PV Stakeholder 2, 2020).

Saturation of the grid through placeholders. The grid is not only nearing saturation, but this problem is exacerbated by the large number of requests for a grid connection points that the DSO has granted to developers, but they have not (yet) used these connection points (PV Stakeholder 5, 2020). This dates back to late-2016, when a large number of project developers filed proposals for projects as the government sought to substitute its feed-in tariff (Kötelező átvétel or KÁT for short) for a green premium

system (Megújuló támogatási rendszer or METÁR for short) (Grabner, 2018). Projects filed at the time are still being constructed, while a large number are unlikely to be developed (PV Stakeholder 8, 2020). Many of the latter still have placeholders for grid connection points. Other projects that fall outside of the flood of proposal upon the suspension of the KÁT system have also contributed to this issue.

Identified good practice

No good practice related to this process was identified.

3. Use of IT systems

A large portion of the administration pertinent to renewable power plants in Hungary is managed electronically. Interviewees were generally satisfied with these services and noted that they streamlined many tasks, but did not fully substitute communication with relevant authorities (see section 2.1.3. 'Administrative authorisation') (PV Stakeholder 1, 2, 5, 6, 2020).

The land registry is available online (FIR, 2020); although, as noted above, it is not always up-to-date. Applications submitted for the power plant at the Regional Offices can be submitted digitally (Kormányablak, 2020b). Power plant construction developments can also be managed electronically through the E-utility website by the developer (E-utility, 2020). Online administration was widely rolled out in Hungary following the introduction of Law CCXXII. of 2015 with services gradually expanded.

Grid connection permits generally have to be filed in written form and either mailed or personally delivered to the DSO. Specific procedures and necessary documents vary based on the DSO. ELMŰ – one of the DSOs – offers the opportunity to provide documentation for household-sized power plants electronically (ELMŰ, 2020b).

4. Complaint procedure

In general, opportunities for successful appeal are very limited. Most decisions taken throughout the administrative authorisation of a project are done at the local or regional level. An appeal can be filed to the Budapest Office of the 12th District, which can override local decisions. However, in practice if the project was not outright refused, the Provincial Office will indicate what must be changed for the project to be greenlit (PV Stakeholder 1, 3, 5, 2020). Changes can be requested by Offices on multiple occasions, before they issue a final approval.

Land repurposing

Decisions taken on land repurposing by local or provincial offices can be contested within fifteen days of the decision having been made (Kormányablak, 2020b). The contestation should be addressed to the Provincial (or the capital city's) Office, at the cost determined by Agricultural Ministry Decree 30/2015. (VI. 5.).

Administrative authorisation

Legal remedies remain to be more theoretical as opposed to being applicable in practice. Local decisions can be overturned by the Budapest Office of the 12th District, which oversees related procedures, but interviewees unanimously agreed that it is much more constructive to communicate with local decision-makers to find a resolution for arising problems. A similar approach has been deemed feasible when dealing with technical

authorities with which developers need to engage in dialogue in order to come to a common resolution.

Nonetheless, developers can submit a plaint to overturn the first instance decision taken by the respective provincial authority. They can submit this at the Provincial Office's notary who will forward it to the Budapest Office of the 12th District, which oversees the activities of Provincial Offices (Kormányhivatal, 2020). The developer has fifteen days to file such plaint and the decision taken lasts – depending on the type of the issue – between fifteen to thirty days. This, in practice, may be longer, given the need to for further evidence gathering, requests for additional documents, requests for the positions of technical authorities, and possible hearings. The Budapest Office of the 12th District can also request for the inquiry to be extended by an additional thirty days, if deemed necessary, of which it must notify the plaintiff.

The developer can file a plaint regarding the second instance decision (taken by the Budapest Office of the 12th District) at the provincial court at which it had filed the initial (first instance claim) for administrative authorisation. The plaint should be submitted within fifteen days of the official decision. The length of the inquiry is similar to that of the second instance inquiry's (Kormányhivatal, 2020).

Grid connection

In the case of grid connection permits, project developers have little room to contest decisions. Cooperating with the DSOs is crucial and in those cases the information on what needs to be changed will be communicated by the DSO instead of declining a request. In theory, project developers can file a complaint at Hungarian Energy and Utilities Regulatory Agency (HEA), but this is seen to be in vain, as action is rarely taken (PV Stakeholder 3, 5, 2020).

5. Specific features to ease administrative procedure

Table 2 below provides information on the existing specific features to ease administrative procedures in Hungary.

Table 2: Specific features to ease administrative procedures

Specific feature	Existing	Short description
Simultaneous procedures	yes	The two key areas of permitting (the Provincial Office and the DSO) can generally run in parallel. There is a wait until the DSO issues the 'technical economic fact sheet', but the two processes can run in parallel subsequently. Since there is a sort of one-stop-shop system that forwards documentation to relevant authorities, these also run in parallel.
National contact points and one-stop-shops	yes	There is a one-stop-shop for relevant authorities who issue permitting. This includes authorities responsible for aviation (civil and military), the local notary, defence, environmental protection, and disaster management. If there are missing documents or issues to be resolved, the project developer has to engage with the technical authority directly.
Application of 2+1 and 1+1 rules	no	

Simple notification procedure	no	
Pre-planning	no	
Pre-application consultation	no	
Project acceptance measures	no	
Measures to streamline litigation by third parties	no	
Other	no	

6. Indicators to measure the performance of the overall process

Table 3 below provides information on the indicators to measure the performance of the overall administrative and grid connection process in Hungary.

Table 3: Performance indicators to assess administrative and grid connection processes

Performance indicator	Description
Average response time by the competent authorities and TSO/DSO for grid connection procedures	Average response time for authorities varies by the procedural step. For general correspondence it is generally a maximum of fourteen days, but turnaround tends to be quicker. For the specific tasks, provincial offices, technical authorities, and DSOs are generally able to maintain deadlines, but this can vary based on the locality or the DSO.
Process duration	Generally speaking, it takes thirty days to obtain a 'technical and economic fact sheet', following which the developer has three to six months to develop the 'Connection Plan'. Upon its completion and acceptance, the project's development takes approximately two years. Thus, all-in-all it takes two and half to three years to develop a large-scale solar PV project. Not counting the preceding time spent on agreeing on the land's acquisition and repurposing.
Project approval rates	N.A. (Projects rarely do not get approval, but frequently require the close cooperation of the project developer with the authorities and the DSO to find a common solution.)
Costs of administrative processes	The developer faces an administrative charge when submitting the request to construct a power plant. This varies based on the installed capacity of the plant from approximately EUR 300 for those with an installed capacity between 50–500 kW (the smallest category) to EUR 4,200 for installations above 400 MW. The developer will face further fees for the permitting of electricity lines and substations, the cost of which varies based on the location and type (MKEH, 2020). The developer has to pay a fee of approximately EUR 500 for the claim it files to connect a power plant to the grid with a power plant with an installed capacity of less than 50 MW (MEKH Decree 15/2016. (XII.20.)). The DSO also collects a fee of approximately EUR 630 for evaluating the connection plan in the same case. These costs vary with larger power plants.
Share of permits that are legally challenged	N.A.

Share of legal challenges that are overruled	N.A.
Stakeholder interests	N.A.

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