DELIVERABLE

1.1 Policy recommendation for the legal framework regarding energy communities with a special focus on the grid

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List of abbreviations

ANRE (RO) .... *National Energy Regulatory Authority*
BNetzA (DE) .... *Federal Network Agency*
CEC .... *Citizen Energy Community*
EAG (AT) .... *Erneuerbaren-Ausbau-Gesetz (Federal Act on the Expansion of Energy from Renewable Sources)*
EEG (DE) .... *Erneuerbare-Energien-Gesetz (Renewable Energy Sources Act)*
EGG (AT) .... *Erneuerbares-Gas-Gesetz (Renewable Gas Act)*
EIA (SE) .... *Environmental Impact Assessment*
Ellag (SE) .... *Swedish Electricity Act*
ElWG (AT) .... *Elektrizitätswirtschaftsgesetz (Electricity Management Act)*
ElWOG (AT) .... *Elektrizitätswirtschafts- und -organisationsgesetz (Federal Act on the Organization in the Field of the Electricity Industry)*
EnWG (DE) .... *German Industry Act*
EU .... *European Union*
IMED .... *Internal Market for Electricity Directive*
NGO .... *Non-governmental organization*
REC .... *Renewable Energy Community*
RED .... *Renewable Energy Directive*
SME .... *Small and medium-sized enterprise*

1. Introduction

This deliverable, which is part of WP 1, focuses on the examination and analysis of the legal norms and regulations that shape energy communities, with a particular attention to the grid. The legal analysis was conducted by the legal team of the University of Graz during Winter 2024 and autumn 2025 through a questionnaire distributed to national legal experts.

It consists of an analysis of the respective legal norms.

As energy law is a dynamic field, this deliverable is based on the legal situation in winter 2024 (Romania), spring 2025 (Sweden, Germany) and autumn 2025 (Austria). Subsequent legal changes such as the commencement of the Austrian ElWG could only be incorporated selectively. It should also be noted that the amendment to the German EnWG has not been incorporated. Further details to the legal acts referred to in this deliverable can be found in Section 3.1.1.

The deliverable aims to present the legal situation in four selected EU (European Union) Member States (Austria, Germany, Romania, Sweden) and to explore the extent to which existing norms and regulations can restrict or facilitate the establishment and operation of energy communities. Particular attention is paid to innovative grid topologies such as microgrids, as well as the active participation of citizens in the energy transition.

The findings of this legal analysis allowed us to conclude this policy report, which provides an overview of the legal framework governing energy communities in the selected project countries. The report identifies key shortcomings and develops policy recommendations that enhance understanding of the opportunities and challenges arising from the legal and regulatory frameworks related to energy communities.

These insights, together with an assessment of legal barriers and facilitators, can support policymakers, municipalities, and other stakeholders in their efforts to expand energy communities, achieve greater social acceptance, and more sustainable governance arrangements, while ensuring compliance with European and national regulations.

In addition to the legal analysis, the psychological team of the University of Graz examined relevant psychological factors that influence energy communities, such as perceived risks and privacy concerns, as well as willingness to participate across all four project countries. In conclusion, by integrating psychological, social, policy, legal and regulatory perspectives - while considering the technical feasibility - WP1 provides essential inputs for WP3 and WP4, which will focus on developing physics-informed AI solutions for the optimized control of energy communities.

In this context, the questionnaire paid particular attention to the grid and grid connection, which has become a crucial factor for the success of energy communities. Accordingly, our analysis explores both, the general legal framework governing energy communities as well as their connection to the grid.

For the purposes of this study, "energy communities" include the Citizen Energy Community (hereinafter CEC) in accordance with Art 16 IMED[1] and the Renewable Energy Community (hereinafter REC) in accordance with Art 22 RED II[2]. In addition, the analysis covers legal arrangements for "peer-to-peer trading" in the sense of Art 2 (18) RED II as well as "renewables self-consumers" in the sense of Art 2 (14) RED II[3]. The study also examines arrangements for

[1] Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU, OJ L 158/125.

[2] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources, OJ L 328/82.

[3] Art 2 (14) Directive 2018/2001: 'renewables self-consumer' means a final customer operating within its premises [...] who generates renewable electricity for its own consumption, and who may store or sell self-

"Incentives for the use of flexibility in distribution networks" in the sense of Art 32 Directive 2019/944[4] as well as for "flexible connection agreements" in the sense of Art 6a Directive 2024/1711[5] in more detail.

The questionnaire further investigates the extent to which relevant legal norms and regulations restrict or facilitate the implementation and/or functioning of energy communities. It also addresses the active participation of citizens in the energy transition and the role of technological innovations, with particular attention to the newly introduced "flexibility arrangements" according to Art 6a Directive 2019/944, as inserted by Directive 2024/1711.

The questionnaire was developed by the Uni Graz Law Team Professor Maria Bertel and Post-doc Negar Scholz-Ghezel. The answers to the questions acquired were developed by Post-doc Negar Scholz-Ghezel (Sweden), Post-doc Negar Scholz-Ghezel and research assistant Felix Maderthaner (Austria), Professor Mihaela Tofan from the Alexandru Ioan Cuza University of Iași (Romania), and Prae-doc Elissa Tschachler, from the Vienna University of Economics and Business (Germany).

Reference should also be made to an article published in Oxford Open Energy in March 2025, which analyses energy communities in several countries and highlights "lessons learnt, challenges, and policy recommendations".[6] For an overview in English on the legal frameworks for energy communities in Germany[7], Austria[8], Romania[9] and Sweden[10] see the sources indicated in the respective footnotes.

2. Overview of the questionnaire structure and focus areas

Part I of the questionnaire addresses the history of "energy communities" in each individual project country, particularly prior to the implementation of the Clean Energy Package, which includes RED II and IMED.

In part II, we inquire about the (most important or main) legal sources of energy law, as well as the laws and related legal texts implementing energy communities.

In part III, we focus on the legal forms of RECs and CECs, as well as other forms of energy communities, including the possibilities of community energy ("informal energy communities"), e.g., based on peer-to-peer trading. This part also encompasses questions on the administrative processes required to establish an energy community. It then addresses the issue of obtaining a

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generated renewable electricity, provided that, for a non-household renewables self-consumer, those activities do not constitute its primary commercial or professional activity.

[4] Art 32 Directive (EU) 2019/944.

[5] Directive (EU) 2024/1711 of the European Parliament and of the Council of 13 June 2024 amending Directives (EU) 2018/2001 and (EU) 2019/944 as regards improving the Union's electricity market design, OJ L 2024/1711.

[6] L Neij, J Palm, H Busch, T Bauwens, S Becker, A Bergek, A Buzogány, C Candelise, F Coenen, P Devine-Wright, T Hoppe, A Kortetmäki, K Pantazis, F Palaiogiannis, M Margosi, D Petrovics, J Plöchl, G Ruggieri, S Ruggiero, K Standal, P Scherhaufer, I Soutar, Energy communities—lessons learnt, challenges, and policy recommendations, *Oxford Open Energy*, Volume 4, 2025, https://doi.org/10.1093/ooenergy/oiaf002.

[7] S. Benedettini, C. Stagnaro, 21 – Energy communities in Europe: a review of the Danish and German experiences, in S. Löbbe, F. Sioshansi, D. Robinson (eds), Energy Communities (2022) 363-384, https://doi.org/10.1016/B978-0-323-91135-1.00015-8.

[8] L .J. Houston, E. Guiot, R. Palermo, B. Cortese, C. D'Alpaos, Energy Communities in Europe. An Interdisciplinary Report on Legal Issues Raising from the EU Legislative Framework and Its Implementation in Selected Member States, in G. Bergonzini, F. Godio, A. Volpato (eds), Annuario del Dipartimento dir Diritto pubblico, internazionale e comunitario. Volume II (2024) 223-286.

[9] C. Gorea, R. Porumb, C. Hurducaci (Gorea), D. Chiorean, Challenges and opportunities of energy communities, *EMERG*, Volume X, 2024, https://doi.org/10.37410/EMERG.2024.2.03.

[10] Y. Vardanyan, Energy Communities in Sweden: Barriers and Driving Forces, *Current Sustainable/Renewable Energy Reports*, Volume 12, 2025, https://doi.org/10.1007/s40518-025-00257-w.

grid connection for energy communities and the necessary requirements and procedures, as well as the corresponding rights and obligations of energy communities. Subsequently, questions are raised regarding the legislative basis or the measures required for the operation and integration of microgrids, as well as the possibility of energy communities to operate their own microgrid. Finally, the regulatory framework governing energy flexibility markets and market participants is addressed. This includes the regulatory framework for the use of and access to flexibilities, as well as the requirements and administrative processes needed to ensure that energy communities can access and participate in flexibility markets. The regulatory framework or provisions required for the establishment of flexible connection agreements within energy communities and the rights of participants under these agreements are also examined in this part.
Part IV deals with the legal aspects of the costs and funding for energy communities.
Part V contains space for further country-specific topics.

3. Barriers and facilitators within the legal framework/legal challenges and opportunities

3.1. The implementation of EU law and the structure of the national legal frameworks governing energy communities

3.1.1 The implementation of EU directives and the legal compliance by Member States

- **Current situation and country highlights**

In **Austria**, the EU directives have been implemented to a high degree with regard to energy communities.[11] Austria has implemented RED II and IMED through its national legislation, primarily the Federal Act on the Expansion of Energy from Renewable Sources (Erneuerbaren-Ausbau-Gesetz - EAG)[12] and the Federal Act on the Organization in the Field of the Electricity Industry (Elektrizitätswirtschafts- und -organisationsgesetz 2010 - ElWOG 2010)[13], which established the framework for RECs and electricity markets.[14] In December 2025, a legislative package (Günstiger-Strom-Gesetz) was adopted, which is intended to fully implement Directive 2024/1711 and align national law with EU law. The package also introduces the new Electricity

[11] See EC² Policy Brief #3 'How to mainstream energy citizenship at the national level.', available under https://online-raketen.at/sites/site0261/media/downloads/policy_brief_3_v2.pdf (11.12.2025).
[12] Bundesgesetz über den Ausbau von Energie aus erneuerbaren Quellen (Erneuerbaren-Ausbau-Gesetz – EAG), BGBl I 150/2021 idF BGBl I 123/2024, available under https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20011619 (27.01.2026).
[13] Bundesgesetz, mit dem die Organisation auf dem Gebiet der Elektrizitätswirtschaft neu geregelt wird (Elektrizitätswirtschafts- und -organisationsgesetz 2010 – ElWOG 2010), BGBl I 110/2010 idF BGBl I 91/2025, available under https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20007045 (30.01.2026).
[14] §§ 79 and 80 of the EAG as well as § 16c of the ElWOG form the legal basis specifically for RECs, while §§ 16d and 16e of the ElWOG apply to both RECs and CECs. Furthermore, the legal definitions of RECs and CECs are derived from the EIWOG under § 7 (15a) and § 16c as well as under § 7 (6a) and § 16b respectively. RECs are further defined in § 79 EAG.

Industry Act (Elektrizitätswirtschaftsgesetz – ElWG)[15], which is set to replace the ElWOG subsequently. The Renewable Gas Act (Erneuerbares-Gas-Gesetz – EGG), which was intended to comply with the recast version of RED II, as amended by RED III, was forwarded to the National Council in 2024 but was not adopted.[16]

In **Germany**, the provisions relevant to energy communities in RED II and IMED have been implemented through an Act of August 2021[17] and Art 1 of the amendment to the Energy Industry Act on July 2021[18]. Germany passed a law implementing significant parts of RED III in August 2025,[19] followed by a law to implement RED III on offshore wind energy and electricity grids in December 2025.[20] Furthermore, an amendment to the German Industry Act (Energiewirtschaftsgesetz – EnWG)[21] was also adopted in December 2025, transposing Directive 2024/1711 into national law and addressing energy communities.[22] However, legal changes that occurred after March 2025 could not be incorporated into this deliverable.

In **Romania**, Law No. 123/2012[23] on electricity and natural gas, as amended, and Law No. 220/2008[24] establish the main legislative framework for implementing RED II. The IMED was implemented through Law No. 155/2020[25], which amends Law No. 123/2012 to update provisions on consumer rights, supplier obligations, and the regulation of energy market participants. Romania is currently preparing legislative proposals to amend Law No. 123/2012 and Law No. 220/2008 to incorporate the updated targets and measures of RED III. Moreover, the

[15] Bundesgesetz zur Regelung der Elektrizitätswirtschaft (Elektrizitätswirtschaftsgesetz – ElWG), BGBl I 91/2025, available under https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20013066 (05.01.2026).

[16] The draft of EGG was adopted by the Austrian Council of Ministers on February 21, 2024 and last voted on in Parliament on July 2024, available under https://www.ris.bka.gv.at/Dokumente/RegV/REGV_2F18555D_4BD3_41E7_AE02_23CBC2E023B9/REGV_2F18555D_4BD3_41E7_AE02_23CBC2E023B9.pdf (11.12.2025).

[17] Gesetz zur Umsetzung von Vorgaben der Richtlinie (EU) 2018/2001 des Europäischen Parlaments und des Rates vom 11. Dezember 2018 zur Förderung der Nutzung von Energie aus erneuerbaren Quellen (Neufassung) für Zulassungsverfahren nach dem Bundes-Immissionsschutz-gesetz, dem Wasserhaushaltsgesetz und dem Bundeswasserstraßengesetz, available under http://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl121s3901.pdf (11.12.2025).

[18] Gesetz zur Umsetzung unionsrechtlicher Vorgaben und zur Regelung reiner Wasserstoffnetze im Energiewirtschaftsrecht, available under http://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl121s3026.pdf (11.12.2025).

[19] Gesetz zur Umsetzung von Vorgaben der Richtlinie (EU) 2023/2413 für Zulassungsverfahren nach dem Bundes-Immissionsschutzgesetz und dem Wasserhaushaltsgesetz sowie für Planverfahren nach dem Baugesetzbuch und dem Raumordnungsgesetz, zur Änderung des Bundeswasserstraßengesetz und zur Änderung des Windenergieflächenbedarfsgesetzes, available under https://www.recht.bund.de/eli/bund/bgbl-1/2025/189 (20.01.2026).

[20] Gesetz zur Umsetzung der EU-Erneuerbaren-Richtlinie in den Bereichen Windenergie auf See und Stromnetze, available under https://www.recht.bund.de/eli/bund/bgbl-1/2025/351 (20.01.2026).

[21] Gesetz über die Elektrizitäts- und Gasversorgung (Energiewirtschaftsgesetz – EnWG), available under https://www.gesetze-im-internet.de/enwg_2005/BJNR197010005.html (27.01.2026).

[22] Gesetz zur Änderung des Energiewirtschaftsrechts zur Stärkung des Verbraucherschutzes im Energiebereich sowie zur Änderung weiterer energierechtlicher Vorschriften, available under https://www.recht.bund.de/eli/bund/bgbl-1/2025/347 (20.01.2026).

[23] Law No. 123/2012 on Electricity and Natural Gas, available under https://legislatie.just.ro/Public/DetaliiDocument/139677 (11.12.2025).

[24] Law No. 220/2008 for Establishing the System for Promoting the Production of Energy from Renewable Energy Sources, available under https://legislatie.just.ro/Public/DetaliiDocument/98742 (11.12.2025).

[25] Law No. 155/2020 for Amending and Supplementing Law No. 123/2012 on Electricity and Natural Gas, available under https://legislatie.just.ro/Public/DetaliiDocument/228440 (11.12.2025).

Ministry of Energy is conducting assessments to align Romania's legal framework with Directive 2024/1711, with the focus on electricity market improvements.
Sweden is still in the process of transposing the EU framework for energy communities, which was previously laid down in the RED II and IMED. Despite this, the Swedish government has enacted several legislative measures aligning with the EU objectives, including the Act (2021:755)[26] as well as the Ordinance (2021:757), referring to RED II[27]. The Electricity Act (Ellag, 1997:857) which refers to the IMED and the EU Electricity Market Regulation 2019/943[28] also regulates the electricity market including the generation, transmission, distribution, and supply of electricity. In April 2025 Sweden published a memorandum proposing legislative changes to implement the provisions on permit procedures in Directive (EU) 2023/2413 as well as legislative proposals to simplifying and clarifying the regulatory framework for environmental assessment.[29] Although Sweden has not yet incorporated Directive (EU) 2024/1711, there is a proposal aiming to incorporate the requirements.[30] In this context, a number of new provisions were proposed into Ellag concerning the requirements for capacity maps for distribution and transmission network operators with a view to improving the design of the Union's electricity market.[31]

- **Issues identified and key challenges**

The EU framework for energy communities, as set out in the RED II and IMED, has already been implemented to some extent in all countries studied, with the exception of Sweden, which is still in the process of implementing both directives. All countries studied are currently in the process of proposing legislative amendments, and drafting or adopting national measures to implement or further implement Directive (EU) 2023/2413 and Directive (EU) 2024/1711.
Therefore, due to the delayed or incomplete implementation, CECs and RECs may not be able to fully benefit from the new opportunities offered by the EU framework. Incomplete or delayed implementation or inconsistent national measures can also result in legal uncertainty, thereby hindering investment in energy communities as well as renewable energy projects. In addition, energy communities may also face practical obstacles that slow down their functioning and expansion due to the infeasibility of adopting their technical systems, infrastructure, or operational procedures.

- **Policy implications and recommendations**

[26] https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/lag-2021755-med-bemyndiganden-att-meddela_sfs-2021-755/ (11.12.2025).
[27] § 1 and § 3; https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/forordning-2021757-om-tidsfrister-och_sfs-2021-757/ (11.12.2025).
[28] § 4; https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/ellag-1997857_sfs-1997-857/ (11.12.2025).
[29] KN2025/00895 "Genomförande av bestämmelser i förnybartdirektivet om tillståndsförfaranden för förnybar energi", available under https://www.regeringen.se/contentassets/ba089065a7ca470bb87402f48ca1aa30/promemoria-genomforande-av-bestammelser-i-fornybartdirektivet-om-tillstandsforfaranden-for-fornybar-energi.pdf (11.12.2025).
[30] See Government Public Inquiries 2024:97: https://data.riksdagen.se/fil/9BE028F2-2342-422B-932D-F49700C41212, Page 479, available under https://www.riksdagen.se/sv/dokument-och-lagar/dokument/statens-offentliga-utredningar/mot-en-effektiv-elektrifiering-av_hcb397/ (11.12.2025).
[31] See Government Public Inquiries 2024:97: https://data.riksdagen.se/fil/9BE028F2-2342-422B-932D-F49700C41212, Page 375-378, available under https://www.riksdagen.se/sv/dokument-och-lagar/dokument/statens-offentliga-utredningar/mot-en-effektiv-elektrifiering-av_hcb397/ (11.12.2025).

Apart from accelerating national implementation processes, national legislators and regulators should adopt not only new legal provisions or measures, but also provide clear guidance and, if necessary, transitional provisions or temporary rules in order to reduce uncertainty on the legal situation. In addition, Member States or national regulatory authorities should provide citizens with easily accessible information on the legal situation, which can include the development of digital tools and one-stop-shops to facilitate understanding of regulatory requirements for citizens and energy communities. This should also involve detailed implementation roadmaps which address the technical and operational adjustments required as a result of the new EU legislation. This may include the development of a digital platform for sharing energy and the adaptation of market procedures to effectively integrate energy communities.

3.1.2. Legal possibilities and rights to sell self-generated electricity

- **Current situation and country highlights**

In **Austria**, self-consumption as an individual, including the possibility of sharing surplus electricity or feeding into the grid, was already possible even before the implementation of the Clean Energy Package. Collective self-consumption was introduced in Austria in 2017 through an amendment to the ElWOG. This amendment, which was part of a more comprehensive legislative package that also included major changes to the Green Electricity Act (Ökostromgesetz)[32], allows natural persons/individuals and companies - especially in multi-party buildings - to share electricity between individual consumers. The ElWG has fundamentally reformed energy sharing in Austria. As of October 2026, energy sharing will be collectively referred to as “shared energy use” (gemeinsame Energienutzung).[33] Within this framework, the possibility of “peer-to-peer trading” is also being introduced, which allows active customers (aktive Kunden)[34] to use the grid to sell self-generated electricity.[35] Furthermore, self-generated electricity can be used at other sites of the same owner without the need to establish a legal form as of October 2026.[36]
In **Germany**, both self-consumption and feeding electricity into the grid are legally permitted. Accordingly, self-consumers may feed surplus electricity into the public grid under special circumstances. § 19 Renewable Energy Sources Act (Erneuerbare-Energien-Gesetz 2021 – EEG) regulate the legal entitlement of operators of renewable energy installations to remuneration for the electricity they feed into the public grid. The provisions stipulate that the operators of such installations have a right to remuneration from the grid operator when electricity from renewable sources or mine gas is fed into the grid. The form of remuneration depends on how the electricity is marked, either as a market premium (Marktprämie) under § 20 EEG 2021, as a feed-in tariff (Einspeisevergütung) under § 21 (1) EEG 2021, or as a tenant electricity subsidy (Mieterstromzuschlag) under § 21 (3) EEG 2021. These entitlements only apply if certain conditions are met.

[32] Bundesgesetz über die Förderung der Elektrizitätserzeugung aus erneuerbaren Energieträgern (Ökostromgesetz 2012 – ÖSG 2012), BGBl I 75/2011 idF BGBl I 69/2025, available under https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20007386 (05.01.2026).
[33] § 68 ElWG.
[34] § 65 ElWG.
[35] § 68 (1) ElWG; more information can be found under https://www.nhp.eu/de/news/newsletter/2025/nhp-news-alert_sondernewsletter_elwg_12_25.pdf (30.01.2026).
[36] § 65 (2) ElWG; more information can be found under https://energiegemeinschaften.gv.at/eigenversorgungsanlage/ (30.01.2026).

Romania allows for self-consumption as well. Romanian legislation has provisions that allow self-consumers, known as prosumers, to sell the electricity they generate. The legal framework governing this is primarily established by Law No. 123/2012 on Electricity and Natural Gas[37], which has been amended to incorporate the concept of prosumers and their rights.

In **Sweden**, however, there is no specific regulatory framework for energy communities, but rather general regulations or measures for private generation and self-consumption of electricity.[38] Collective self-consumption is permitted in Sweden in a building with multiple apartments if all apartments belong to and are connected to the same grid connection, and the entire building has a contract with the energy provider. Nevertheless, the electricity consumption can also be measured internally and charged to the rent.[39] However, it is not yet permitted if the electricity is transmitted via a grid with a grid concession and shared among different owners.[40] In other words, it is not possible for different properties to share the electricity in a community-owned grid. However, a government inquiry has been published which proposes to allow the interconnection of multiple apartment buildings within the same property, which would lead to a more widespread form of collective self-consumption.[41] As of now, there is an exception that enables "interconnecting single parts of a power plant" between different buildings through an internal grid.[42]

- **Issues identified and key challenges**

The main legal challenge in this regard lies in restrictive and inconsistent rules governing self-consumption and collective energy sharing in most of the countries surveyed. Energy communities are predominantly regulated differently from collective self-consumption, and while individual self-consumption is generally permitted, certain limitations - such as restrictions on the use or sharing of electricity via public grids and the inability of different properties to share electricity via a community-owned grid - significantly hinder the development of broader energy communities. These inconsistencies lead to legal uncertainty, unequal access for consumers (particularly those in multi-apartment buildings), and impede the promotion of RECs and shared self-generation.

- **Policy implications and recommendations**

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[37] Law No. 123/2012 on Electricity and Natural Gas, available under https://legislatie.just.ro/Public/DetaliiDocument/139677 (11.12.2025).

[38] Mattsson, O. (2021). The potential role of energy communities in Sweden, Lunds universitet. Page 19, available under http://lup.lub.lu.se/student-papers/record/9052339 (11.12.2025).

[39] D. Frieden, A. Tuerk, C. Neumann, S. d'Herbemont, J. Roberts, Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU framework, 2020, https://doi.org/10.13140/RG.2.2.25685.04321, Page 36.

[40] D. Frieden, A. Tuerk, C. Neumann, S. d'Herbemont, J. Roberts, Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU framework, 2020, https://doi.org/10.13140/RG.2.2.25685.04321, Page 36.

[41] D. Frieden, A. Tuerk, C. Neumann, S. d'Herbemont, J. Roberts, Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU framework, 2020, https://doi.org/10.13140/RG.2.2.25685.04321, Page 36. See also Government Offices of Sweden (2019): Moderna tillståndsprocesser för elnät, available under https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2019/06/sou-201930 (11.12.2025).

[42] D. Frieden, A. Tuerk, C. Neumann, S. d'Herbemont, J. Roberts, Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU framework, 2020, https://doi.org/10.13140/RG.2.2.25685.04321, Page 36.

A key policy recommendation on this matter is to harmonize national regulations with EU directives by explicitly supporting the sharing of energy through public grids under fair and non-discriminatory conditions. This includes the need to clarify the rules for self-consumed and shared electricity, and to ensure equal access for self-consumers within the same building (including multi-apartment blocks) and for participants in collective projects. Such measures would reduce legal uncertainty and promote citizen participation in renewable energy projects.

3.1.2. Legal recognition of different types of energy communities in national legislation

- **Current situation and country highlights**

Austrian legislation provides a framework to enable and support energy communities. It recognizes and regulates different types of energy communities. A framework for two key types of energy communities (CECs and RECs) is introduced in the EAG and ElWOG.[43] Moreover, the other types of energy communities can be merged within the scope of the existing legal and regulatory framework, but often have slightly different targets or structures.

In general, the energy community may be established in Austria in any form of a natural person, a municipality, a legal entity or a local authority, as well as in form of other legal entities under public law or small and medium-sized enterprises, organised as an association, cooperative, or limited liability company (GmbH). Furthermore as a partnership, corporation or similar association with legal personality, as long as it consists of at least two members or shareholders and is entitled to rights and obligations that primarily serve to bring ecological, economic or social benefits to its members or the areas in which it operates.[44] As of October 2026, energy communities will be regulated under the ElWG and, together with new concepts such as peer-to-peer trading, will be collectively referred to as "shared energy use" (gemeinsame Energienutzung).[45] However, energy communities, and in particular CECs and RECs, continue to exist, and their legal structure remains essentially unchanged.[46]

In **Germany**, national law does not yet formally distinguish or define different types of energy communities. In contrast to Austria, CECs and RECs do not have their own legal form under German law, but are subjected to the existing legal forms available under German corporate, cooperative, and association law, as Germany has not created a separate legal status or legal entity type for them, especially not for CECs.

Romanian legislation recognizes various types of energy communities, although the framework is still primarily structured around general categories rather than detailed, specific types, like those explicitly distinguished by participant composition or governance structures. Under the current framework, two main types of energy communities, CECs[47] and RECs[48], are recognized. CECs have a broader scope and are more inclusive, as they potentially encompass various types

[43] §§ 79 and 80 of the EAG as well as § 16c of the ElWOG form the legal basis specifically for RECs, while §§ 16d and 16e of the ElWOG apply to both RECs and CECs. Furthermore, the legal definitions of RECs and CECs are derived from the EIWOG under § 7 (15a) and § 16c as well as under § 7 (6a) and § 16b respectively. RECs are further defined in § 79 EAG.

[44] § 16b (2) ElWOG and § 79 (2) EAG.

[45] § 68 ElWG.

[46] §§ 65 to 72 ElWG.

[47] CECs are governed in part by Law No. 155/2020, which amends Law No. 123/2012, and aligned with Directive (EU) 2019/944.

[48] RECs are governed primarily by Law No. 123/2012 (as amended) and secondary legislation in line with Directive (EU) 2018/2001.

of members, including non-governmental organizations (NGOs), cooperatives, residential associations, and small and medium-sized enterprises (SMEs). They aim to foster citizen participation in the energy market, with a focus on local governance and non-profit objectives rather than the realization of profits. RECs in Romania, on the other hand, include private individuals, local authorities, and SMEs as active participants. However, no detailed distinctions are made based on the type of member, allowing communities to organize themselves according to their specific needs and member composition.

While Romanian law provides flexibility in terms of governance structure and member roles, it does not yet define in detail different types of energy communities based on member categories such as agricultural producers, educational institutions, or housing cooperatives.

In **Sweden**, there is currently no specific formal legislation for energy communities, but there are already existing models such as wind and solar Power Communities or Solar PV Cooperatives, Eco-Villages, etc. that have similar characteristics to energy communities as laid down in the EU legislative framework.[49] Under Swedish law, an economic association (usually a cooperative) is the most common legal form for energy communities; however, there are other organizational structures or forms, namely incorporated associations, followed by non-profit associations (samfällighet), tenant-owned apartments (bostadsrättsföreningar), non-profit organizations, as well as commercial enterprises as limited liability companies or individual enterprises.[50] Each type of organization or entity has different legal and operational requirements. These structures allow for participation of a wide range of stakeholders, including private individuals, SMEs, local authorities, NGOs, and residential associations. Sweden also supports local and small-scale energy systems such as heating cooperatives in rural areas,[51] which often rely on community involvement and financial incentives for residents.[52] These flexible models enable various types of communities to participate and engage in energy production and distribution.

- **Issues identified and key challenges**

The analysis shows that Member States such as Austria and Romania have provided at least two main types of energy communities: CECs and RECs. In Austria, other types of energy communities may also merge under existing structures, which provides additional flexibility. Romania likewise offers flexibility in governance structure and membership. In contrast, Germany has not yet defined specific legal forms for CECs or RECs. Instead, energy communities operate under existing legal forms. Sweden also lacks formal legislation specifically regulating energy communities, but there are several existing models with similar characteristics. Overall, energy communities in all four Member States rely on different or pre-existing legal forms, which entail different rights and obligations. The main legal challenges concern the lack of harmonization and legal clarity, as well as the absence of uniform governance and membership rules in national laws. Even in Member States with more developed frameworks, such as Austria and Romania, obstacles remain, particularly regarding legal certainty and administrative complexity, as people are unfamiliar with the legal matters involved, which discourage them from establishing an energy community.

[49] Magnusson, D., & Palm, J. (2019). Come Together—The Development of Swedish Energy Communities. Sustainability, 11 (4), 1056. https://doi.org/10.3390/su11041056.

[50] Magnusson, D., & Palm, J. (2019). Come Together—The Development of Swedish Energy Communities. Sustainability, 11 (4), 1056. https://doi.org/10.3390/su11041056.

[51] Magnusson, D., & Palm, J. (2019). Come Together—The Development of Swedish Energy Communities. Sustainability, 11 (4), 1056. https://doi.org/10.3390/su11041056.

[52] See https://pub.norden.org/nordicenergyresearch2023-03/sweden.html (11.12.2025).

- **Policy implications and recommendations**

Member States should provide explicit legal provisions that clearly define energy communities, while still allowing flexibility in organizational form and membership. Harmonization of key legal aspects - such as governance, market participation, and grid access - would help ensure consistent rights and obligations across jurisdictions. National authorities should simplify administrative procedures and provide clear information to reduce regulatory complexities. Finally, financial and technical support mechanisms, including targeted incentives and access to funding programs, should be strengthened to empower citizens, municipalities, and small enterprises to engage investment and participation in community energy projects.

3.2. Legal and administrative procedural aspects of establishing energy communities

3.2.1. Legal form requirements for energy communities

- **Current situation and country highlights**

According to the RED II[53] and IMED[54], any legal form may be chosen for an energy community as long as it can exercise legal rights and be subject to obligations in its own name (legal person/legal personality). Legal personality is therefore the only prerequisite for the REC or CEC. Accordingly, the REC or CEC is defined as a legal entity which is based on open and voluntary participation and is effectively controlled by its shareholders or members.[55] Member States should have the possibility to choose any (legal) form of entity for RECs or CECs as long as it can exercise legal rights and be subject to obligations in its own name.[56] Both RED II and IMED do not explicitly prohibit a particular form of CEC, but IMED does explicitly refer to certain examples of CEC legal forms.[57] In this respect, the European legislator has left it to the Member States to freely choose a legal form that would be most suitable for RECs and CECs.
In **Austria**, which has already fully implemented the EU directives, there is no obligation under national law to choose a specific legal form for RECs or CECs. These entities may operate under various legal forms, such as an association (*Verein*), cooperative (*Genossenschaft*), general partnership (*Offene Gesellschaft, OG*), limited partnership (*Kommanditgesellschaft, KG*), limited liability company (*Gesellschaft mit beschränkter Haftung, GmbH*), joint stock company (*Aktiengesellschaft, AG*) or similar association with legal personality,[58] with variations in the applicable rules[59].
Similarly, **Germany** has not imposed any specific legal form for RECs or CECs, so they can operate under the existing legal forms available in German corporate, cooperative, and association law.
In **Romania**, several types of legal forms are available for establishing and operating energy communities, whereby the members jointly determine the most suitable form based on their

[53] Art 2 (16) RED II with regard to “Renewable Energy Community”.
[54] Art 2 (11) IMED with regard to “Citizen Energy Community”.
[55] Art 2 (16) RED II and Art 2 (11) IMED.
[56] Recital 71 RED II for RECs and Recital 44 IMED for CECs.
[57] According to Recital 44 IMED, legal form could be for example an association, a cooperative, a partnership, a non-profit organisation or a small or medium-sized enterprise for CECs.
[58] § 16b (2) and § 16d (1) ElWOG as well as § 79 EAG; § 67 (2) ElWG as well as § 79 EAG as of October 2026.
[59] See the Austrian Vereinsgesetz (VerG), Genossenschaftsgesetz (GenG) und Gesellschaft mit beschränkter Haftung-Gesetz (GmbHG) for more information.

needs and objectives. These entities are formed on the basis of open and voluntary participation and are effectively controlled by their members. The energy community is based in fact on an association of several natural or legal persons who ensures its control. It is therefore an expression of the fundamental right of association, which can take various forms, the best-known being companies or associations.

In contrast, **Sweden** has not yet fully implemented the EU directives on energy communities and lacks specific legislation on their legal form.[60] Nevertheless, practical models such as Solar Power Communities or Solar PV Cooperatives, Wind Power Cooperatives, Eco-Villages, and etc., which have similar characteristics to energy communities, already exist in Sweden.[61]

Under Swedish law, an economic association (usually a cooperative) is the most common legal form for energy communities; however, there are also other organizational structures or forms, such as incorporated associations, followed by non-profit associations (samfällighet), tenant-owned apartments (bostadsrättsföreningar), non-profit organizations, as well as commercial enterprises as limited liability companies or individual enterprises.[62] For example, energy cooperatives associations or economic cooperatives (e.g., Solar or Wind Power Cooperatives) should be established as Economic Associations by three or more natural or legal persons[63] and each member has a voting right, unless specified differently in the statutes.[64]

- **Issues identified and key challenges**

While the freedom to choose any legal form promotes flexibility and accessibility and facilitates the establishment of energy communities, it can also present practical challenges and create complexity and financial obstacles for citizens who are unfamiliar with legal structures. The possibility to select between different legal forms enables energy communities to choose a structure that best suits their specific objectives and operational needs. This flexibility can significantly reduce administrative barriers and encourage community participation in the energy transition.

In practice, however, this flexibility can lead to complexity and uncertainty, especially for citizens with limited legal experience or organizational capacity. The variety of possible legal forms entails different governance structures, tax implications, and registration procedures. As a result, potential members often require specialized legal advice to understand which form best suits their objectives and ensures compliance with both corporate and energy legislation. This leads to additional costs, time, and administrative burdens, which can discourage individuals or small communities from establishing an energy community at all. Furthermore, the lack of a standardized or recommended legal model can lead to inconsistent interpretations by national authorities and variations in implementation across different regions. Without clear guidance or model statutes, there is a risk that citizens may be discouraged from establishing or participating in energy communities, and that only those with sufficient financial and legal resources can effectively navigate the establishment process.

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[60] This was developed by Energy Markets Inspectorate (Ei) to regulate energy communities and has not yet been fully incorporated into Swedish legislation. See https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2019/06/sou-201930 (27.10.2025).

[61] Magnusson, D., & Palm, J. (2019). Come Together—The Development of Swedish Energy Communities. Sustainability, 11 (4), 1056. https://doi.org/10.3390/su11041056.

[62] Magnusson, D., & Palm, J. (2019). Come Together—The Development of Swedish Energy Communities. Sustainability, 11 (4), 1056. https://doi.org/10.3390/su11041056.

[63] Chapter 2 on setting up an economic association, §§ 1 and 3 Act (2018:672).

[64] Chapter 6 on members' voting rights, § 3 Act (2018:672).

- **Policy implications and recommendations**

The policy aim should be to keep the flexibility for energy communities to freely choose any legal form, while reducing legal and administrative complexity and making the process easier and more cost-effective. This can be achieved through clear guidance, standardized templates, and institutional support to ensure that the establishment of energy communities remains accessible and cost-efficient. In this context, the development of standardized or model legal templates for at least most commonly used legal forms, accompanied by explanatory guidance, would help potential members to understand the governance, liability, and compliance requirements, thereby reducing the need for costly legal advice. In parallel, national or regional one-stop-shops could be established to provide practical information, administrative assistance, and legal advice throughout the formation process of an energy community. To further lower entry barriers, governments could also offer financial and technical support programs that cover parts of the initial legal and administrative costs associated with establishing an energy community.

3.2.2. The administrative procedure for establishing an energy community

- **Current situation and country highlights**

Under the **Austrian** legal framework for energy communities, there is no obligation to choose a specific legal form for establishing RECs or CECs. However, depending on the form chosen - such as an association, cooperative, limited liability company, or other similar association with legal entity - the community must be established in accordance with the respective legal rules and requirements governing that form. Following the establishment of a legal entity, energy communities are required under § 16d (2) ElWOG to inform the grid operators of their existence, including details of generation and consumption facilities and the feed-in energy allocations. In accordance with § 16d (4) ElWOG, energy communities were also obligated to provide the regulatory authority, E-Control, with necessary information to enable the regulatory authority to verify compliance with the statutory requirements/provisions. As of October 2026, these obligations will be regulated under §§ 70 (2) and (4) ElWG, without substantial change.
In **Germany**, there is also no single administrative procedure for establishing the legal form and granting plant permit. Citizens who want to set up a CEC must form a legal entity (and in addition append drafting statutes, board appointments and notifications of special authorities) and can commence its activities upon approval, if the other criteria are met.[65] Registration in the market master data register may also be required,[66] and the community must notify the Federal Network Agency (BNetzA) that the onshore wind turbines or solar installations belong to a citizen energy company[67] in order to be eligible for the benefits under §22b EEG 2023. At the time of commissioning, proof must be provided that the community meets the legal criteria,[68] initially by means of a self-declaration and, upon request, by providing evidence. If the proof is not submitted within two months of the deadline, the right to remuneration shall expire.

[65] § 3 No. 15 EEG 2023.
[66] § 111e EnWG.
[67] § 22b (1) and (2) EEG 2023.
[68] According to § 22b (4) sentence 1 EEG 2023; the proof must be provided for the following periods: For the initial proof, for the twelve months preceding the notification according to (1) No. 1 or (2) No. 1, whereby for the requirements according to § 3 No. 15 lit a, c, and d, proof for the period of existence of the community is sufficient if this period is shorter; and for all subsequent proofs, for the twelve months preceding the time of proof.

Under **Romanian** law, there are several types of legal forms under which an energy community can be established and operate. Electricity can only be sold to end consumers by entities that hold a supply license in Romania, unless a natural or legal person sells electricity to end consumers who are supplied directly from the installation related to the production unit or from the electrical networks they operate.[69] Energy communities are therefore generally required to work with a licensed supplier to sell energy to their members. The only exception applies when the energy is delivered directly from the community's own production installations or through networks owned and operated by the community itself - in this case, no supply license is required.
Considering current legislation and the need to minimize legislative changes, the National Energy Regulatory Authority (ANRE) has developed two operational models for CECs and RECs, whereby the commercial relationship with end consumers is carried out by a supply license holder, ensuring compliance with national market regulations while allowing community-based energy sharing and participation.
In **Sweden**, depending on the chosen organizational form or structure, different registration requirements, rules, and tax conditions apply under Swedish law. For example, wind power cooperatives (as the largest existing model) go through two long permitting processes, i.e., environmental permits[70] and grid connection (concessions)[71]; these are separate procedures carried out by different authorities[72]: The site selection process for wind power plants in Sweden requires the acquisition of legal rights and follows an administrative authorization process. Permission under the Heritage Conservation Act (1988:950)[73] must be included in the Environmental Impact Assessment (EIA). For installations located outside Swedish territorial waters at sea, permissions must also be obtained in parallel with the EIA under the Swedish Exclusive Economic Zone Act (1992:1140)[74] and the Act on the Continental Shelf (1966:314)[75].
The application for grid connection (concessions) is separate from the administrative authorization process and can only be applied for once the exact connected power level is determined. This process can sometimes only be started after administrative authorization has been completed. Furthermore, corporate legal and fiscal processes, such as applying for electricity certificates and guarantees of origin, occur only after the plant is operational.

- **Issues identified and key challenges**

The lack of a specific legal form for energy communities can lead to legal and administrative complexities for those interested in establishing an energy community. The freedom to choose between various legal forms, of which each entails distinct rules or governance structures, can result in considerable initial administrative burdens, particularly for citizens with limited legal

[69] According to the Electricity and Natural Gas Law No. 123/2012 as subsequently amended and supplemented.
[70] Chapter 9 (Environmentally hazardous activities and health protection) of the Environmental Code/law (1998:808) forms the legal basis for the environmental permit.
[71] According to the Swedish Electricity Act (1997:857), a grid connection permit (concession) is required for the connection of a new electricity generation plant or a power plant to high-voltage power lines, which is issued by the Swedish Energy Market Inspectorate (Ei). Ordinance (2007:215) also outlines specific exemptions where the concession requirement is not required.
[72] See https://www.eclareon.com/wp-content/uploads/2023/12/RES-Simplify_National-Report_SE.pdf (11.12.2025).
[73] Kulturmiljölag (1988:950).
[74] Lag (1992:1140) om Sveriges ekonomiska zon.
[75] Lag (1966:314) om kontinentalsockeln.

knowledge/expertise or financial resources. This can discourage them from establishing an energy community and delay administrative approvals.

- **Policy implications and recommendations**

A possible policy recommendation could be to develop a one-stop-shop for energy communities or standardized model statutes or guidelines to facilitate the establishment and governance of energy communities.

3.3. Grid connection for energy communities

3.3.1. Legal right to grid connection as well as grid connection procedure and contractual framework (procedural rules and responsibilities)

- **Current situation and country highlights**

Austria has already specified the right to grid connection, whereby the operator of a distribution grid has the right to connect all end consumers and producers within the area of its distribution grid to its grid.[76]
All types of energy communities are required to inform grid operators of their existence after the establishment of a legal entity and provide them with information and any changes.[77] Energy communities were also obligated to provide the regulatory authority, E-Control, with the necessary information to enable the regulatory authority to verify compliance with the statutory requirements upon request.[78]
The grid operators, in turn, must provide information about the grid levels.[79] The members of a REC must be located within the concession area of the same grid operator;[80] therefore, the communities must first determine which distribution grid covers their area. In other words, it is necessary to know which distribution grid one belongs to and be familiar with the area when establishing an energy community.
The national technical standards for grid connection are governed by a comprehensive set of Technical and Organizational Rules for Operators and Users of Networks,[81] which are mandatory in Austria and were drawn up by E-Control in cooperation with the grid operators on the basis of § 22 No. 2 E-Control Act (E-ControlG).[82] Additionally, there are also revised guidelines „Guidelines for the grid connection of electricity generation plants with typical examples"[83], which provide non-binding information on typical examples of the connection of electricity generation plants (as of November 2024) and offer practical guidance, without prejudice to official decisions, whether by E-Control or other authorities.[84] As of October 2026, the respective regulations will be covered

[76] § 44 (1) ElWOG; § 116 (1) ElWG.
[77] § 16d (2) ElWOG; § 70 (2) ElWG.
[78] § 16d (4) ElWOG; § 70 (4) ElWG.
[79] § 16c (3) ElWOG; § 70 (6) ElWG.
[80] § 16c (2) ElWOG; § 66 (1) ElWG.
[81] Technische und Organisatorische Regeln für Betreiber und Benutzer von Netzen (TOR).
[82] See https://www.e-control.at/marktteilnehmer/strom/marktregeln/tor (11.12.2025).
[83] Revised guideline (version 1.3 of 28.11.2024), available under https://www.e-control.at/documents/1785851/0/Leitfaden-Netzanschluss-v1_3.pdf/c5eeb70c-d6de-458a-57e1-afd0cc0a5e7b?t=1733395451369 (11.12.2025).
[84] See https://www.e-control.at/documents/1785851/0/Leitfaden-Netzanschluss-v1_3.pdf/c5eeb70c-d6de-458a-57e1-afd0cc0a5e7b?t=1733395451369 (11.12.2025), Page 4.

by the ElWG. Energy communities will then be able to appoint an organizer (Organisator) to take care of administrative tasks such as communicating with the grid operator.[85]

Germany has also addressed grid connection rights relevant to energy communities in several provisions, although not always explicitly under the term "energy communities".

Grid operators are obligated to enable the connection without delay and to provide grid access on a non-discriminatory basis.[86] Renewable energy installations have priority in Germany when it comes to grid connection and feed-in capacities.[87] Energy communities are also obligated to comply with all applicable technical connection rules, provide technical and operational data, pay the grid access costs, and fulfil registration and ongoing reporting duties.

Romanian law does not provide any specific rules for energy communities, and all energy consumers have a grid connection. There are currently no additional or particular provisions for grid connection of the energy community, as its members already have such connection.

In **Sweden**, the requirements for acquiring, using, sharing, or transferring a grid concession, including exemptions, are explicitly regulated in national legislation.[88]

A grid concession is generally required to build or use power lines.[89] Concessions are subject to strict conditions to protect safety, human health and the environment, as well as public interests.[90] Only limited exemptions apply, mainly for internal networks within a single, clearly defined area or property, where production and storage facilities share a common grid connection.[91] These exemptions do not allow electricity sharing between different residential properties.[92] As a result, energy communities cannot obtain a concession-free shared grid across multiple properties, making broader community electricity sharing within the community impossible under current Swedish law.

Energy communities nevertheless have the right to be connected to the electricity grid and to use it on objective, non-discriminatory, and reasonable terms and conditions[93]. Grid operators must connect installations and transport electricity unless there is a justified lack of capacity or other special reasons.[94] Once the connection has been established and the fee has been paid, the community has the right to use the grid.

- **Issues identified and key challenges**

In Austria, there are factors that can complicate and potentially delay the establishment of energy communities such as informational and geographic barriers.

A lack of information or delayed access from grid operators can be an obstacle, as energy communities rely on the public grid.[95] If grid operators fail to provide information or access is delayed, the realization of an energy community can be significantly delayed and slowed down or even blocked. Moreover, uncertainty about affiliation to a distribution grid can be an obstacle, as

[85] § 68 (2) ElWG.
[86] § 17 (1) EnWG.
[87] § 8 EEG 2023.
[88] Chapter 2 (Network concession and pipes at traffic routes) of the Electricity Act (1997: 857).
[89] Chapter 2, 18 § Electricity Act (1997:857).
[90] Chapter 2 Electricity Act (1997:857).
[91] Ordinance (2007:215).
[92] § 22 c of the Ordinance (2007:215).
[93] Chapter 4 (Connection to the electricity network and transmission of electricity), § 1 Electricity Act (1997:857).
[94] Chapter 4 (Connection to the electricity network and transmission of electricity), § 2 Electricity Act (1997:857).
[95] § 16c (2) and 16d (6) ElWOG.

interested participants in a REC need to determine which distribution grid they belong to, which can be a barrier, especially for those who are unfamiliar with the grid infrastructure. In Austria, for example, there are geographical constraints. Under § 16c (2) ElWOG, members of a REC in the area of a medium or low-voltage grid must be located in the concession area of the same grid operator.[96] This requires members to be familiar with the areas when establishing an energy community and restricts or prevents broader participation, especially in rural areas or regions with fragmented grid operators.

Unlike Austria, where there are national technical standards for grid connection, which are governed by the comprehensive set of Technical and Organizational Rules for Operators and Users of Networks, as well as guidelines for the grid connection of electricity generation plants, Germany lacks clear legal recognition, and this, coupled with slow implementation and occasionally inadequate guidance or support, poses significant barriers to the grid connection for energy communities. Further challenges include lengthy and non-transparent approval processes, unpredictable and often excessive connection costs, as well as grid congestion and capacity constraints. Together, these obstacles also contribute to limited coordination during the planning phase.

- **Policy implications and recommendations**

To address these challenges, the development of a coherent national framework is essential. While more consistent technical standards would simplify the grid connection process, legal provisions should require grid operators to provide clear, easily understandable, and publicly accessible information on grid access conditions, including standardized guidelines and application forms, as well as legally binding response timelines. Complementing this, establishing simple, transparent, and user-friendly procedures for submitting and processing grid access requests - ideally by providing support structures such as one-stop-shop advisory services or harmonized digital platforms - help energy communities to overcome administrative and technical complexities, significantly reduce the administrative burdens especially for small communities or individuals without technical expertise, and improve the feasibility of forming energy communities. In addition, the introduction of templates or standardized contracts provided by the public authorities would simplify the process for energy communities and provide greater legal certainty, especially for participants without technical or legal expertise.

At the same time, legislation should require grid operators to provide publicly accessible online geographic maps or standardized online tools that enable potential members to identify the relevant grid operator and the concession area. This would reduce the information barriers that currently hinder the formation of energy communities and encourage interested individuals to participate in an energy community.

3.3.2. Grid connection charges and cost allocation

- **Current situation and country highlights**

In **Austria**, grid charges are regulated by the Ordinance on Electricity System Charges 2018 (Systemnutzungsentgelte-Verordnung 2018 - SNE-V 2018)[97], which defines how system usage

[96] § 66 (1) ElWG as of October 2026.

[97] Verordnung der Regulierungskommission der E-Control, mit der die Entgelte für die Systemnutzung bestimmt werden (Systemnutzungsentgelte-Verordnung 2018 – SNE-V 2018), BGBl II 398/2017 idF BGBl

fees are calculated and billed under the ElWOG[98], and also regulates grid level allocation, temporary connections, and cost allocation rules.[99] Under this framework, only RECs benefit from reduced grid fees, while CECs pay the full grid usage charges. The reductions in grid fees only apply to RECs and depend on the grid level and whether the community is local or regional;[100] local communities at grid levels 6 and 7 receive a 57% reduction, while regional communities receive 28% at levels 6 and 7 and 64% at levels 4 and 5.[101] Electricity generated and consumed within a renewable energy community is also exempt from the renewable support contribution.[102] Flexible connections (non-firm grid connections) offer faster access but are not yet subject to specific cost rules. In Austria, there are no legally defined dynamic grid fees, so all customers, including those with flexible connections, pay fixed grid charges based on energy consumption, system usage fee, grid loss fee, and metering devices cost. As of 2027, the respective regulations will be covered by the ElWG.[103] An important development among the comprehensive changes to the network fee system is that CECs will also be able to claim reduced fees at the local and regional level in the future.[104]

Germany does not recognize a distinct legal form for renewable energy communities, so CECs are subject to the general rules applicable to all grid users. They do not receive any special reductions for using the public grid and must pay the standard general grid charges. These charges are to be paid by grid users regardless of geographical distance in accordance with § 17 EnWG. In Germany, legal provisions governing cost distribution can be found in the Low Voltage Connection Ordinance (NAV)[105] and the Low Pressure Connection Ordinance (NDAV)[106], which regulate cost reimbursement for the establishment or modification of grid connections[107] and construction cost subsidy (BKZ - Baukostenzuschuss)[108]. Additional legal regulations regarding cost allocation apply to renewable energy generation systems.[109] In addition, the Electricity Network Charges Ordinance (StromNEV)[110] plays an important role in determining grid charges in Germany.[111] It specifies how grid costs are calculated, allocated, and ultimately passed on to users in the form of grid charges.

II 370/2024, available under https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=20010107 (30.01.2026).

[98] §§ 52 to 58 ElWOG.

[99] § 62 ElWOG.

[100] § 5 (1a) SNE-V 2018.

[101] SNE-V 2018.

[102] § 75 (5) EAG.

[103] §§ 127 to 138 ElWG.

[104] More information can be found under: https://www.nhp.eu/de/news/newsletter/2025/nhp-news-alert_sondernewsletter_elwg_12_25.pdf (26.01.2026).

[105] Verordnung über Allgemeine Bedingungen für den Netzanschluss und dessen Nutzung für die Elektrizitätsversorgung in Niederspannung (Niederspannungsanschlussverordnung – NAV), available under https://www.gesetze-im-internet.de/nav/BJNR247710006.html (30.01.2026).

[106] Verordnung über Allgemeine Bedingungen für den Netzanschluss und dessen Nutzung für die Gasversorgung in Niederdruck (Niederdruckanschlussverordnung – NDAV), available under https://www.gesetze-im-internet.de/ndav/ (30.01.2026).

[107] § 9 NAV/NDAV.

[108] § 11 NAV/NDAV.

[109] § 16 EEG 2023 and § 3 (1) sentence 4 KWKG 2025, the latter of which refers to § 8 of the KraftNAV (Theobald/Kühling/Hartmann/Wagner, 128. EL Dezember 2024, EnWG § 17 Rn. 107 and 108).

[110] Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen (Stromnetzentgeltverordnung – StromNEV), available under https://www.gesetze-im-internet.de/stromnev/index.html (30.01.2026).

[111] The principles for determining network charges are set out in § 3 (1) StromNEV.

Germany, however, does permit flexible (non-firm) grid connections. Pursuant to § 17 (2b) EnWG, electricity grid operators may offer grid users the option of entering into a flexible grid connection agreement allowing the grid operator the right to require the grid user to limit their maximum power consumption or feed-in capacity, either statically or dynamically. According to § 8a (1) EEG 2023, the grid operator and the plant operator may agree on a connection-side limitation of the maximum active power feed-in into the grid (a flexible grid connection agreement). The plant operator is responsible for ensuring compliance with this active power limitation at all times through appropriate technical measures. The limitation may only apply during specific time windows and may vary in magnitude across these periods. § 8a (2) EEG 2023 specifies minimum requirements for such agreements. These agreements must address the scope and timing of limitations, technical requirements, duration, and liability. Although flexible connections can accelerate connection and reduce reinforcement needs, the law does not provide any special reduced grid charges for customers using them; instead, flexible connections mainly adjust technical obligations, not the tariff structure.

In **Romania**, there are no specific provision for the grid connection of energy communities, and flexible connections (non-firm grid connections) are not yet explicitly described in Romanian law.

In **Sweden**, customers subscribe to a specific amount of transmission capacity in accordance with the national grid's usage agreement,[112] for which the customer pays a fee based on the grid tariff's capacity fee, which covers the costs associated with grid operations, maintenance, and utilization.[113] Customers also pay a usage fee to cover the costs of purchasing electricity losses in the grid.[114] Moreover, no specific cost rules have yet been established in Sweden for flexible connections (non-firm grid connections).

- **Issues identified and key challenges**

A key concern is the inconsistent approach to different types of energy communities. Austria provides significant tariff reductions for RECs only, while CECs do not receive comparable benefits. At the same time, the lack of legally defined dynamic grid fees and the absence of cost rules for flexible connections in Austria lead to uncertainty for future investments and limit the integration of flexible connections. However, with the introduction of the ElWG, these issues are being tackled in Austria, with new regulations coming into force in 2027.

In Germany, the lack of a specific legal form for RECs results in them being subject to full grid charges without any reductions or special conditions, which can undermine their competitiveness and make them less attractive for people to join or invest in. Although Germany has established detailed provisions for flexible (non-firm) grid connections, these agreements regulate technical responsibilities rather than economic incentives. The lack of appropriate tariff differentiation may be considered insufficient to reflect the benefits of the system or promote broader acceptance.

Romania and Sweden face even more fundamental regulatory gaps. Both Member States lack explicit legal provisions for flexible connections, and there are no specific rules on grid connection

[112] Each year (in September), the Board of Svenska kraftnät decides on the rate to be applied for the next calendar year. More information on usage agreement for 2025 can be found under: https://www.svk.se/siteassets/aktorsportalen/anslut-till-transmissionsnatet/nyttjandeavtalet-2025.pdf (11.12.2025).

[113] See https://www.svk.se/en/stakeholders-portal/electricity-market/connecting-to-the-grid/tariffcharges/ (11.12.2025).

[114] See https://www.svk.se/en/stakeholders-portal/electricity-market/connecting-to-the-grid/tariffcharges/(11.12.2025).

for energy communities. This leads to legal uncertainty and slows down the introduction or implementation of energy communities and flexible connections.

- **Policy implications and recommendations**

To address these challenges, harmonized, nondiscriminatory rules on grid charges and flexible connections should be established in all Member States so that all types of energy communities benefit from clear, consistent cost-allocation frameworks that promote flexibility and reduce legal uncertainty.

3.3.3. Data protection and data security in smart grids

- **Current situation and country highlights**

Data security and data protection in **Austria** are enshrined through the ElWG[115] on the smart grid regulation, which explicitly addresses data security and protection in the introduction and operation of smart grids. This includes the obligation that the regulatory authority must inform end consumers about the introduction of smart meters[116] and publish an annual report tracking the progress of the introduction, with a specific focus on costs, infrastructure, and data protection and security issues, while also reflecting developments at the EU level.[117] The authority is further required to engage with representatives of consumer protection and e-economy as well as with national data protection authorities.[118]

In **Germany**, data security and privacy constitute central pillars of smart grid regulation. The regulatory framework emphasizes the protection of critical energy infrastructure, mandates compliance with technical and cybersecurity standards, and requires strict adherence to data protection regulations. These measures ensure that the development of smart grids proceeds within a robust legal and technical environment that protects both system integrity and consumer data.

Unlike Austria and Germany, smart grid regulation in **Romania** is not yet shaped by data security or data privacy considerations because a nationwide smart grid system has not been yet implemented. As a result, regulatory structures for data security and protection, or technological standards in this context remain largely undeveloped.

Furthermore, in **Sweden**, security and privacy considerations play a role in smart grid regulation. Grid operators must provide users with adequate information about new meter installations[119] and are required to measure and record electricity flows.[120] They must also ensure that access to consumption data is interoperable, non-discriminatory, and transparent.[121]

- **Issues identified and key challenges**

[115] §§ 50 and 51 ElWG.
[116] § 51 (3) ElWG.
[117] § 51 (5) ElWG.
[118] § 50 (1) ElWG.
[119] Chapter 6 (Installation of new meters), § 9 Electricity Act (1997:857).
[120] Chapter 6 (Installation of new meters), § 1 Electricity Act (1997:857).
[121] Chapter 6 (Installation of new meters), § 3 Electricity Act (1997:857), as required by Regulation (EU) 2023/1162.

Currently, data security and privacy in the regulations of smart grids differ among the EU Member States studied, leading to potential challenges. While Austria, Germany, and Sweden integrate data security and privacy into their smart grid regulations, Romania lacks such provisions as it has not yet implemented a nationwide smart grid system. In Romania, the lack of a nationwide introduction of smart grid and corresponding regulatory structures leads to uncertainty, potentially exposing future operators and consumers to gaps in data protection and unclear procedures. This regulatory lag could also hinder smart grid adoption and complicate harmonization with EU standards.

- **Policy implications and recommendations**

For the operation of energy communities and for improving data security and privacy in smart grid regulation, a complete introduction of smart meters and harmonized legal frameworks across all Member States is essential. Corresponding regulatory frameworks should be established at the European level, and where needed, complemented by national regulations to ensure consistent implementation, data security, and consumer protection.
In this context, national regulators should ensure that smart grid deployment is fully compliant with EU data protection requirements, while providing clear guidelines on consumer consent and rights. In addition, Member states without established smart grids, like Romania, should prioritize the development of comprehensive regulatory structures before nationwide deployment, drawing on best practices from countries with more advanced frameworks like.

3.4. Legislative basis and financial/regulatory incentives for microgrid development

- **Current situation and country highlights**

In **Austria**, there is no specific regulation for microgrids; they are generally regulated by the existing ElWOG (now replaced by the ElWG), which applies to all electricity grids. It is in principle possible for energy communities to own and operate distribution networks or their own (micro-)grid in Austria; however, this is an exception and subject to specific conditions.[122] Moreover, Austria does not offer any specific financial or regulatory incentives to promote investment in microgrids, but there are financial incentives for the electricity from renewable energy sources.
Similar to Austria, there is no specific, comprehensive legal regime tailored exclusively to microgrids in **Germany**. Instead, microgrids must operate within the broader regulatory structures for energy networks. Under special circumstances and strict regulatory conditions, it can be possible that energy communities operate their own (micro-)grid.[123] Furthermore, Germany also does not currently provide any special financial or regulatory incentives exclusively for microgrids. However, various existing funding programs and broader support schemes for decentralized energy systems and renewables innovation can indirectly promote investment in

[122] B. Fina, H. Fechner, Transposition of European Guidelines for Energy Communities into Austrian Law: A Comparison and Discussion of Issues and Positive Aspects. *Energies*, Volume 14, 2021, https://doi.org/10.3390/en14133922.
[123] E.g., § 110 EnWG.

microgrids – particularly within the framework of pilot projects, "sandboxes" and community-based energy models.[124]

In **Romania**, there is still no specific legislative framework specifically designed to support the operation or integration of microgrids. Romanian law recognises energy communities as separate legal entities, and the members of energy communities are usually energy consumers before joining the respective community. As a result, the need to have a separate grid for the community has not yet emerged in practice in Romania. Nevertheless, because an energy community has its own legal personality, the possibility to obtain a separate grid connection or to operate its own (micro-)grid does exist in principle. At present, dedicated financial or regulatory incentives to promote investment in microgrids are not available, and the practical development of community-owned microgrids remains dependent on further regulatory progress in Romania.

In **Sweden**, the current policies do not permit energy communities to take control of their own electricity grids.[125] Energy communities are currently prohibited from owning and operating their own electricity grids, as existing regulations prevent this and the electricity grid is a monopoly that requires a permit (concession) to operate.[126] However, energy communities may utilize an exemption under Ordinance (2007:215)[127], which allows for the establishment of non-concession grids (IKNs). Ordinance 2007:215 (IKN-förordningen) allows the establishment of certain networks without a concession to facilitate the sharing of energy within microgrids and the development of microgrids. According to this Ordinance, certain internal low-voltage electricity networks can be operated without a concession, provided they are located within a specific area.[128] Nevertheless, this exemption does not apply when the energy communities comprise multiple residential buildings (e.g. single-family houses).

In this context, ground cables drawn between a production facility or an energy storage for electricity and nearby buildings do not require a network concession which makes it relatively easy for an energy community to share the electricity generated in a production facility among the members of the community. However, it is not yet permitted if the electricity is transmitted via a grid with a grid concession and shared among different owners.[129] In other words, it is not possible for different properties to share the electricity in a community-owned grid. This simplifies the administrative procedure for establishing microgrids and enables, for example, the shared use of energy within the properties or between buildings with individual grid connections. In addition, Sweden introduced a tax reduction for the micro-production of electricity from renewable energy in January 2015 for the kilowatt hours of electricity from renewable energy

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[124] Examples include: Tenant electricity model (§ 42a EnWG in conjunction with § 21 (3) EEG 2023) and joint building supply (§ 42b EEG 2023).

[125] Palm, J. (2021). The Transposition of Energy Communities into Swedish Regulations: Overview and Critique of Emerging Regulations. Energies, 14, 4982. https://doi.org/10.3390/en14164982.

[126] Palm, J. (2021). The Transposition of Energy Communities into Swedish Regulations: Overview and Critique of Emerging Regulations. Energies, 14, 4982. https://doi.org/10.3390/en14164982.

[127] Ordinance (2007:215) on exemptions from the requirement for a network concession under the Electricity Act (1997:857).

[128] According to § 22 c of the Ordinance (2007: 215) on exemptions from the requirement for a network concession under the Electricity Act "an internal low-voltage network for the transmission of electricity from a facility that produces electricity or from an energy storage facility may, if the facility is directly connected to the internal low-voltage grid and the low-voltage grid is not an overhead line, be built and used without a grid license
1. within the DSO's property, and
2. between buildings and installations that each also have a connection to a power line or a power line network used with the support of a network license. Ordinance (2022:1391)".

[129] D. Frieden, A. Tuerk, C. Neumann, S. d'Herbemont, J. Roberts, Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU framework, 2020, https://doi.org/10.13140/RG.2.2.25685.04321.

that the producer has fed into the grid during the calendar year, with a maximum amount of SEK 18,000 per year.[130] However, the Swedish government has planned to abolish this tax reduction for the micro-production of renewable electricity by January 2026.[131] There is also currently a 20% subsidy for the installation of grid-connected PV systems in Sweden within the framework of the tax reduction for green technologies. However, the Swedish government has planned to reduce this subsidy to 15% starting from July 2025, which is the subsidy rate that applied before 2023.[132]

- **Issues identified and key challenges**

Across all project countries examined, the key legal challenge to the development of microgrids is the lack of a dedicated and coherent regulatory framework. Although EU legislation promotes the development of local energy systems, national measures that would directly facilitate the deployment of microgrids - such as technical standards, grid-access rules, or dedicated incentive programs - have not yet been fully implemented. In Austria and Germany, microgrids must be operated within the general electricity grid legislation, and may only be owned or operated by energy communities under restrictive, exceptional conditions. The lack of specific regulations creates regulatory uncertainty and makes community-scale network operation legally and administratively complex. Romania faces a similar situation; although energy communities have legal personality and could in principle operate their own grid, the law provides no practical means or incentives for doing so, and the concept has not yet been implemented in practice.
Sweden stands apart because it explicitly prohibits community ownership or operation of concession-based grids and limits arrangements similar to microgrids to narrow exemptions for non-concession internal networks. While this allows for limited local sharing of electricity within specific areas, it prevents the creation of community-owned microgrids that cover multiple properties. This simplifies the administrative procedure for establishing microgrids and enables, for example, the shared use of energy within properties or between buildings with individual grid connections. Taken together, however, these policies highlight a common challenge that microgrids do not currently fit well within national energy laws, forcing operators to navigate frameworks designed for traditional, centralized grids, which slows the emergence of community-owned or locally managed microgrid systems.

- **Policy implications and recommendations**

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130 See https://www.regeringen.se/contentassets/8903f8cb3a3e45c08fbace0cc74dde53/forandrade-skattesubventioner-for-solceller-och-mikroproduktion-av-el-samt-utvidgad-mottagningsplikt-for-elleverantorer.pdf (11.12.2025), Page 11-12.
Further information on the tax reduction for micro-production of electricity from renewable energy for business property and private residence in Sweden can be found here:
Business property: https://www.skatteverket.se/foretag/skatterochavdrag/fastighet/mikroproduktionavfornybarelnaringsfastighet.4.309a41aa1672ad0c837b4e8.html?q=Mikroproduktion (11.12.2025), and
Private residence: https://www.skatteverket.se/privat/fastigheterochbostad/mikroproduktionavfornybarelprivatbostad.4.12815e4f14a62bc048f41a7.html (11.12.2025).

131 See https://www.regeringen.se/contentassets/8903f8cb3a3e45c08fbace0cc74dde53/forandrade-skattesubventioner-for-solceller-och-mikroproduktion-av-el-samt-utvidgad-mottagningsplikt-for-elleverantorer.pdf (11.12.2025), Page 3.

132 See https://www.regeringen.se/contentassets/8903f8cb3a3e45c08fbace0cc74dde53/forandrade-skattesubventioner-for-solceller-och-mikroproduktion-av-el-samt-utvidgad-mottagningsplikt-for-elleverantorer.pdf (11.12.2025), Page 3.

A first priority would be to establish a dedicated regulatory framework for microgrids that clarifies ownership possibilities, operational responsibilities, and conditions for connecting microgrids. Furthermore, enhanced coordination between national regulatory authorities, municipalities and distribution system operators would facilitate the integration of microgrids into broader energy planning. Clear rules for grid access, cost sharing, and data exchange would ensure that microgrids can complement rather than conflict with existing network structures. It would also be important to explicitly recognize the role of energy communities as potential microgrid operators. This could include, for example, easing restrictions on community ownership of local infrastructure. Another core recommendation is the introduction of targeted financial or regulatory incentives, such as investment grants or reduced grid tariffs. Pilot projects and regulatory sandboxes should also be expanded so that communities can test microgrid models without facing the full regulatory burdens from the outset.
Overall, these measures would provide legal certainty, reduce administrative barriers, and create a more enabling environment for community-based and local energy systems across all four countries.

3.5. Energy communities and flexibilities

3.5.1. National legal status for energy communities in the use of and access to flexibility markets

- **Current situation and country highlights**

In Austria, even before the full implementation of the EU rules on incentives for the use of flexibility in distribution networks,[133] the regulatory authority E-Control, coordinated with distribution system operators and issued non-binding guidelines for grid development plans requiring transparent information on future flexibility needs.[134] These plans, first published in 2024, are intended to ensure that distribution grid operators take flexibility services such as demand response, load, generation, and storage management into their planning considerations, and that market participants receive timely, transparent information about future flexibility requirements.
The ElWG in Austria now explicitly addresses the use of flexibility in distribution networks and incorporated market-based procurement of flexibility services,[135] obliging distribution grid operators to procure flexibility services in transparent, non-discriminatory, and market-based procedures if such services are more cost-effective than grid expansion.[136]
Grid operators must also develop a harmonized procurement framework and product specifications that guarantee effective and non-discriminatory participation of all market actors,

[133] Art 32 Directive (EU) 2019/944.
[134] See https://www.e-control.at/marktteilnehmer/strom/leitfaden-fuer-verteilernetzentwicklungsplaene#:~:text=Artikel%2032%20(3)%20der%20Strombinnenmarktrichtlinie%20(RL%20(EU),einer%20%C3%B6ffentlichen%20Konsultation%20der%20Regulierungsbeh%C3%B6rde%20vorgelegt%20werden, and https://www.e-control.at/documents/1785851/0/2023-11-09_Leitfaden_NEP_f%C3%BCr_Verteilernetze_-_Version_2024_1.1.pdf/3f04f480-276c-c73a-878f-93a4f2a1cecb?t=1714468962942 (11.12.2025).
[135] In § 139 ElWG, which directly corresponds to Art 32 of Directive (EU) 2019/944.
[136] § 139 (1) ElWG.

including those offering distributed generation, load control or energy storage.[137] The regulatory authority must also issue an ordinance establishing uniform rules for acquiring flexibility via a new Joint/Common Flexibility Platform, unless it determines that market-based procurement would be economically inefficient or distort the market.[138]

The platform is envisaged as a digital infrastructure that provides comprehensive information on flexibility needs and available flexibility services, while coordinating the efficient use and procurement of flexibility services to support secure and cost-effective distribution of grid operation.[139]

In **Germany** there are currently no fully established or clearly defined requirements and standardized administrative procedures specifically aimed at ensuring that energy communities can seamlessly participate in and access flexibility markets.

§ 14c EnWG serves to implement Article 32 (1) and (2) of Directive (EU) 2019/944 into German law. However, § 14c EnWG has not yet produced any legal effects, as the BNetzA has not yet approved or established specifications for the procurement of flexibility services. Since § 14c (1) EnWG has not yet produced any legal effects, there is currently no directive-compliant implementation of Article 32 (1) of Directive (EU) 2019/944 in Germany.[140]

Romania's national framework for flexibility markets is only partially developed and does not yet provide specific rules for energy communities. Flexibility-related procedures are governed mainly through the national regulations on dispatchable generation, consumption and storage, on balancing market operation and settlement, and on the calculation and settlement of imbalances of the parties responsible for balancing,[141] but these rules apply generally to all market actors and do not establish dedicated pathways or standards for CECs or RECs to participate. Access to flexibility markets is therefore subject only to the general principle of free market entry for legally constituted entities that comply with existing regulatory requirements.

The Romanian electricity market operates under ANRE's oversight, with producers, suppliers, transport and distribution operators, consumers and the market operator OPCOM participating across regulated and competitive segments. Rights and responsibilities follow standard market roles: producers forecast and offer energy, suppliers procure for consumers, and OPCOM provides the wholesale trading platforms. Overall, no explicit national legal status or tailored access conditions exist for energy communities in flexibility markets.

The regulatory framework for energy flexibility in **Sweden** is centred in Ellag[142], which empowers the government and designated authorities to set rules for how distribution system operators procure and define flexibility services. Ellag requires distribution system operators to develop and publish standardized specifications for flexibility products[143] and allows regulators to assess how the use of such services contributes to efficient grid operation when determining network revenues.[144] Flexibility services, including demand-side measures, can therefore influence whether a network operator's allowed revenue is increased or reduced, tying regulatory incentives directly to efficient grid use.[145] Although there are no specific administrative procedures to ensure that CECs or RECs gain access to flexibility markets, the broader framework - especially the rules on aggregation - supports wider participation. Recent amendments to Ellag

137 § 139 (2) ElWG.
138 § 139 (3) and (5) ElWG.
139 § 139 (2) ElWG.
140 BeckOK EnWG/Assmann, 14. Ed. 1.3.2025, EnWG § 14c Rn. 28 and 29.
141 See https://legislatie.just.ro/Public/DetaliiDocument/224697 (11.12.2025).
142 Section 15 Swedish Electricity Act (1997:857).
143 Section 15 Swedish Electricity Act (1997:857).
144 Chapter 5, 11 § and 12 § Swedish Electricity Act (1997:857).
145 Chapter 5, 11 § and 12 § Swedish Electricity Act (1997:857).

strengthen the role of aggregators and facilitate the entry of aggregation services[146] by guaranteeing their right to access electricity markets and by ensuring that electricity users may purchase or sell flexibility services independently of their supply contracts. Aggregation service providers must notify network operators before starting service, operate transparently and non-discriminatorily, and enable users to switch providers free of charge within three weeks.
Overall, the regulations shape market behavior by promoting competition in flexibility services, preventing discriminatory barriers to entry, and incentivizing distribution system operators to use flexibility as a tool for efficient grid management. The enhanced rights for aggregators and electricity users aim to open the flexibility market to a wider range of participants, although community-based actors do not yet benefit from tailored access provisions in Sweden.

- **Issues identified and key challenges**

Across the countries examined, a common legal issue is that the implementation of Article 32 of Directive (EU) 2019/944 "Incentives for the use of flexibility in distribution networks" remains either incomplete or only partially operational in most national legal systems, leading to inconsistencies and legal uncertainty for market participants.
This no longer applies to Austria following the implementation of the ElWG. The ElWG represents a significant step forward as it explicitly addresses the use and procurement of flexibility.
In Germany, the legal framework presents significant challenges. Although § 14c of the EnWG aims to implement Article 32 (1) and (2) of Directive (EU) 2019/944, it currently has no legal effect because the BNetzA has not issued the necessary specifications for flexibility procurement. The absence of these implementing measures means that Germany has no compliant regulatory framework for market-based procurement of flexibility. As the regulatory framework has not taken effect, energy communities lack legal certainty as to how they could participate in flexibility markets, what technical or administrative requirements they would have to meet, or whether participation is even possible.
The situation in Romania is characterized by the absence of a fully developed legal framework for flexibility markets and the lack of specific rules for energy communities. Although flexibility-related issues are governed through national regulations, these provisions generally apply to all market participants and do not specifically refer to CECs or RECs. The lack of specific recognition of energy communities as a type of participant also means that their rights remain undefined and their potential contributions to system flexibility is not legally recognized.
Sweden has a more developed regulatory framework for flexibility, based on Ellag[147] and recent reforms to strengthen the role of aggregators. These rules promote market competition and aim to reduce discriminatory barriers to market entry. However, Sweden does not recognize energy communities in flexibility markets as an independent category of actors. Despite the relatively well-developed legal framework and strong regulatory support for aggregation services in Sweden, from which community-based actors benefit indirectly, there are still no tailored procedures or simplified administrative requirements to ensure that CECs or RECs can access and benefit from flexibility markets on a fair basis.
Taken as a whole, the main challenge across most Member States is a lack of legal clarity, as only Austria has yet established a clear, fully operational, and community-orientated legal environment for participation in the flexibility market, resulting in energy communities facing

[146] Chapter 9, 30 § to 34 § Swedish Electricity Act (1997:857).
[147] Section 15 Swedish Electricity Act (1997:857).

legal uncertainty, disproportionate administrative burdens, and, in some cases, the practical impossibility of participating in flexibility markets.

- **Policy implications and recommendations**

To ensure that energy communities have fair and effective access to flexibility markets, all Member States should implement Article 32 of Directive (EU) 2019/944 in a way that not only requires distribution system operators to procure flexibility in a transparent, market-based and non-discriminatory manner, but also specifies how smaller, decentralized actors - including community-based ones - can meet requirements in practice.
National regulatory authorities should also explicitly recognize energy communities as a distinct participant category in flexibility markets. This means introducing proportionate administrative pathways, simplified compliance obligations, and tailored registration procedures that reflect the organizational characteristics of community actors. This would help clarify the roles, responsibilities and interactions of energy communities with distribution system operators, aggregators and market operators, and reduce the current legal uncertainty and administrative burden.
Furthermore, the development of digital flexibility platforms and data exchange frameworks is crucial for transparency and market access and would significantly lower the barriers to entry for energy communities. Such platforms can not only provide comprehensive information on flexibility needs and available flexibility services, but also coordinate the efficient use and procurement of flexibility services to support the secure and cost-effective operation of distribution grid.

3.5.2. Legal status of flexible connection agreements

- **Current situation and country highlights**

According to Art 6a of Directive (EU) 2019/944, inserted by EU Directive 2024/1711, regulatory authorities should develop a framework for system operators in order to establish flexible connection agreements.
Austria, until recently, had not fully implemented the EU provisions on establishing flexible connection agreements, which led to an infringement procedure (No. 2025/0113) initiated in May 2025 due to incomplete implementation within the initial implementation deadline.[148] Through the adoption of the new ElWG, however, Austria has transposed Art 6a into national law. The ElWG explicitly introduces provisions on peak capping (Spitzenkappung) for new or modified wind and photovoltaic installations (§ 101 ElWG) and creates the possibility of flexible grid for producer (§ 103 ElWG). § 103 of ElWG allows for the connection of grid-active power and facilitate the faster integration of more feed-in capacity by enabling specification of the grid operator's output, which serves to implement Art 6a of Directive (EU) 2019/944 on flexible grid connection contracts.
In **Germany**, the framework for flexible connection agreements is primarily set out in § 17 (2b) EnWG. Under this provision, grid operators may offer grid users flexible grid connection agreements that include static or dynamic limits on electricity feed-in or consumption. These agreements must clearly define the scope and timing of any restrictions, the duration of the flexible grid connection agreement, the required technical setup for implementing them, and the user's liability if the agreed limits are exceeded. Grid users are entitled to transparent information

[148] https://www.parlament.gv.at/gegenstand/XXVIII/EU/21910?selectedStage=100 (11.12.2025).

about all conditions but must also comply with the contractual limits, install the necessary controllable equipment, and assume responsibility for any breaches of the agreed maximum feed-in or withdrawal capacity.
In **Romania**, the legal situation for establishing flexible connection agreements within energy communities is still in an early stage of development and Romanian legislation has not yet introduced detailed, explicit rules that govern how such agreements should function within energy communities. Romania's current regulatory approach to energy communities is built mainly on the broader principles of the competitive energy market.
The law focuses on the free choice of the consumer for the most convenient provider of energy, and this principle is extended to energy communities, which are treated as legal entities participating in the market. As a result, energy communities can operate, produce, and trade energy, but the rules that would specifically define flexible connection agreements are not yet formally developed.
In **Sweden**, flexible connection agreements are not yet regulated in a way that reflects the new obligations introduced by Directive (EU) 2024/1711, but there is a proposal aimed at incorporating the requirements.[149]

- **Issues identified and key challenges**

A key challenge arises from the incomplete or delayed implementation of EU requirements regarding flexible connection agreements in almost all of the Member States examined. These delays lead to legal uncertainty for both system operators and grid users.
The lack of harmonized regulatory approaches to flexible connection agreements among Member States can also lead to challenges. While the Austrian ElWG provides for specific models such as peak capping and flexible grid access for producers, Germany relies on a contractual framework with static or dynamic limits for feed-in and consumption. Romania and Sweden have not yet introduced any explicit rules for flexible connection agreement. These differences lead to inconsistencies in the use of flexibility across the EU and may result in potential barriers to cross-border investment or project development.
Moreover, the absence of a specific regulatory framework for flexible connection agreements within energy communities leads to additional legal uncertainty, as energy communities operate under general market rules without specific provisions for flexible connection arrangements. This legal gap may also hinder the development of community-based renewable energy projects and impede access to and use of flexibility in grid.

- **Policy implications and recommendations**

A timely and complete implementation of EU requirements to reduce legal uncertainty and create predictable conditions for system operators and grid users should be prioritized in all Member States. In addition, a specific framework for energy communities should be developed at national level to clarify how they can access and participate in flexible connection agreements. Establishing clear rights, obligations and technical conditions for energy communities would help unlock their potential to contribute to local flexibility, support the deployment of renewable generation at the community level, and ensure their equal treatment within the evolving electricity system.

[149] See Government Public Inquiries 2024:97 https://data.riksdagen.se/fil/9BE028F2-2342-422B-932D-F49700C41212 (11.12.2025), Page 479.Available under https://www.riksdagen.se/sv/dokument-och-lagar/dokument/statens-offentliga-utredningar/mot-en-effektiv-elektrifiering-av_hcb397/ (11.12.2025).

4. Key policy recommendations

No. 1: Provide clear guidance (e.g. digital platforms) in order to reduce uncertainty on the legal situation in a certain country.

No. 2: Support the sharing of energy through public grids under fair conditions.

No. 3: Provide a clear definition of energy communities and make administrative procedures as easy as possible.

No. 4: Keep the flexibility for energy communities to freely choose the best legal form and keep the process as simple as possible (e.g. through standardized templates).

No. 5: Develop a one-stop-shop for energy communities.

No. 6: Develop a coherent national framework (including the legal provisions on energy communities as well as the grid).

No. 7: Establish clear rules on grid charges and eventually reduced fees for energy communities.

No. 8: Establish smart grids fully compliant with EU data protection requirements.

No. 9: Establish a clear legal framework for microgrids.

No. 10: Art 32 of Directive (EU) 2019/944 should be implemented in all Member States, recognizing the special status of energy communities.

No. 11: A specific legal framework for access as well as participation in flexible connection agreements for ECs should be developed at national level.