

Energy Communities & Self-Production in Greece #8

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Text

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Summary

This report on energy communities and self-production is based on the latest available data from the General Commercial Register (GEMI) (November 2025) and the Hellenic Electricity Distribution Network Operator (HEDNO) up to September 2025. It follows on from The Green Tank's seven previous analyses, which were carried out each time the relevant databases were updated by the HEDNO. Compared to our previous report (April 2025), the main findings are summarized as follows:

Energy Communities

- ***The number of energy communities has changed:*** currently, 1,747 energy communities of all legal forms are operating in Greece. Compared to April 2025, the number of the two newer legal forms of energy communities established by Law 5037/2023 has decreased by 6: -7 in RECs and + 1 in CECs.
- ***New project requests have come to a standstill:*** Only 18 new energy community project requests have been submitted since March 2025 and 76 since January 2024, 62 of which are self-production projects.
- ***Project electrification shows slight progress:*** The capacity of energy community projects in operation has risen to 1,465 MW (30% of total requests), up from 1,397.5 MW in March 2025. More than half of the new capacity relates to self-production projects; with their electrified capacity now amounting to 101.4 MW, they account for 6.9% of energy community projects' total electrified capacity.
- ***The capacity of canceled projects saw a much greater increase:*** Cancelled capacity climbed to 2,482.6 MW, exceeding half of the total requested capacity (50.8%) and representing an increase of 352 MW compared to March 2025.
- ***Central Macedonia remains in the lead:*** the Region of Central Macedonia ranks first with regard to the number of energy communities (297) and projects' electrified capacity (354.5 MW); however, this region also records the highest cancelled projects' capacity (682.6 MW).
- ***Western Macedonia holds two negative distinctions:*** it continues to rank first regarding both the ratio of canceled to electrified projects (each electrified MW corresponds to the cancellation of approximately 3.6 MW) and the lack of grid space, as 88.7% of the Region's canceled capacity relates to projects that had previously received notification of inability to connect from the HEDNO.

Self-production

- ***The 1 GW barrier has been surpassed:*** The total capacity of self-production projects in operation stands at 1,072.6 MW, an increase of 135 MW compared to March 2025.
- ***Requests are slowing down:*** The first nine months of 2025 saw 4,728 new self-production project requests, while nearly three times as many (12,901) had been submitted during the respective period of 2024.

- **The transition from net metering to net billing is slow:** since the introduction of the new mechanisms (2 October 2024) and up to September 2025, nearly 90% of the capacity of new self-production requests are projects implementing net billing and virtual net billing. However, the capacity of self-production projects applying the new mechanisms amounts to just 82.2 MW (7.7% of total self-production capacity), while only 16.5 MW of these correspond to requests submitted after the Joint Ministerial Decision came into force (2 October 2024).
- **Regarding projects eligible for funding in transition regions:** in the areas eligible to receive funding from the Just Development Transition Program (PDAM) 2021-2027, there are 16.25 MW of pending virtual net metering and virtual net billing projects with a connection contract and 16.95 MW of less “mature” projects implementing these mechanisms.
- **Self-production requires additional electrical space:** The combined capacity of electrified and pending self-production projects amounts to 1,844 MW, thus approaching the 2 GW grid space reserved for self-production projects under Law no. 5037/2023.

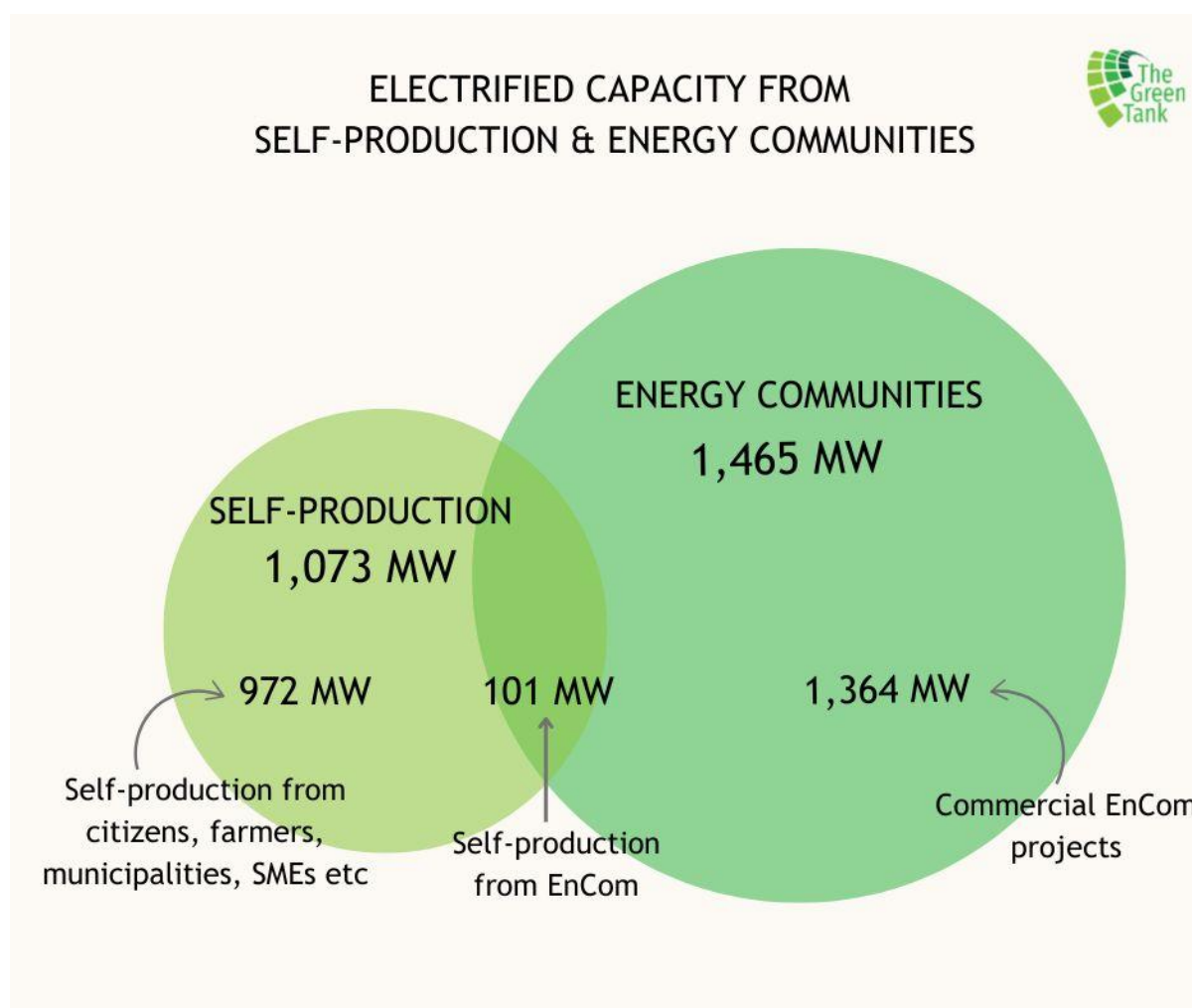


Figure 1: Electrified capacity from energy communities and self-production. Self-production accounts for just 6.9% (101.4 MW) of electrified energy community projects; the total electrified capacity of self-production projects by citizens, businesses, farmers, energy communities and other entities amounts to 1,072.6 MW in September 2025.

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Introduction

Self-production and energy communities constitute the principal institutional tools to ensure citizens' active and meaningful participation in the energy transition.

Self-production systems may be installed by individuals, farmers, businesses, and other bodies. In the case of energy communities, projects are set up collectively by citizens, businesses, municipalities and other entities.

As of 31 October 2024, self-production projects may be implemented by applying either net billing or virtual net billing. However, exceptions still apply to projects that have received funding from EU and national sources, which can submit requests based on the former mechanisms of net metering and virtual net metering. The main difference between the older and newer schemes lies in the netting and compensation of the surplus energy produced by the renewable energy source (RES) system that is not concurrently consumed by its owner or beneficiary. In net-metering, the energy produced is offset against the energy consumed throughout the day over a three-year period. In net-billing, netting occurs in real time as the produced energy is consumed; surplus energy is either discarded or injected back into the grid and compensated at the wholesale electricity market price at the time of injection.

This report includes self-production projects applying all four mechanisms. With regard to energy communities, all legal forms of energy communities registered in the General Commercial Registry (GEMI)¹ have been considered, together with all types of projects that were allowed to develop from 2018 to date, namely, both self-production projects (virtual net metering & virtual net billing) and commercial projects selling the energy produced to the grid and distributing the profits to their members.

Our analysis is based on the latest available data from the GEMI (November 2025)² and the Hellenic Electricity Distribution Network Operator (HEDNO) up to and including September 2025³. In addition, the latest developments regarding the relevant institutional framework, parliamentary scrutiny, and funding are presented.

¹ Energy Communities; Renewable Energy Communities; Citizen Energy Communities; Limited Liability Cooperatives; Cooperatives; Renewable Energy Civil Law Partnerships; Consortia; and Private Companies.

² GEMI, 2025, <https://bit.ly/3FdiqHK>.

³ HEDNO, Archive of Applications for the connection of RES and CHP plants under HEDNO competence (October 2025), <https://shorturl.at/Hy3Tl> & Archive of Applications for the connection of net-metering and virtual net-metering projects (October 2025), <https://shorturl.at/P92wE>.

Energy Communities

Nationwide

According to the GEMI's latest available data, there are currently (November 2025) **1,747 active⁴ energy communities**. Of these, 1,542 are registered as Energy Communities under Law no. 4513/2018; 136 as Limited Liability Cooperatives; 1 as a Consortium; 1 as a Civil Law Partnership under CC article 784; and 2 as private companies. **In addition, 37 Renewable Energy Communities (RECs) and 28 Citizens' Energy Communities (CECs) are operating**; the latter are both legal forms established by Law no. 5037/2023. Compared to April 2025 (The Green Tank's previous report), records show 39 additional energy communities. It is worth noting that new legal forms appear to be on a downward trend, as RECs decreased by 7, while CECs increased by just one.

According to the HEDNO's data, since the launch of the energy community institution in Greece in 2018 and up to September 2025, **6,391 project requests have been submitted in total for both categories of energy community projects (commercial and self-production), with a cumulative capacity of 4,889 MW**. Nonetheless, requests have effectively come to a standstill following the recent changes in the institutional framework, relating mainly to the shift from (virtual) net metering to (virtual) net billing; indeed, merely 76 new requests for energy community projects have been submitted over the period January 2024 - September 2025.

With regard to electrified capacity, 2,025 projects have been connected and are operating; their capacity amounts to 1,465 MW, which represents 30% of the total requested capacity. The majority of these projects (1,831 projects with a capacity of 1,363.9 MW) sell the produced energy to the grid (commercial projects)⁵. Only 194 self-production projects with a cumulative capacity of 101.4 MW have been electrified (just 6.9% of total electrified capacity) and none of them are implementing virtual net-billing. However, **the progress in the electrification of self-production projects implemented by energy communities in particular is noteworthy**; capacity rose from 4.2 MW in 2022 to 14.4 MW in 2023, and more than tripled to 50.1 MW by the end of 2024; moreover, an additional 51.2 MW of self-production projects by energy communities were connected in the first nine months of 2025, thus, more than doubling the previous year's electrified capacity. **Nevertheless, the overwhelming predominance of commercial over self-production projects (93.1% vs 6.9% of electrified capacity) reveals that the energy community institution in Greece has been largely exploited for profit.**

As illustrated in Figure 2, **following a period of rapid growth, the pace of energy community project electrification has declined**. Thus, while 400 projects with a capacity of 302 MW were connected in 2023 (+36.7% compared to the previous year), 2024 saw the

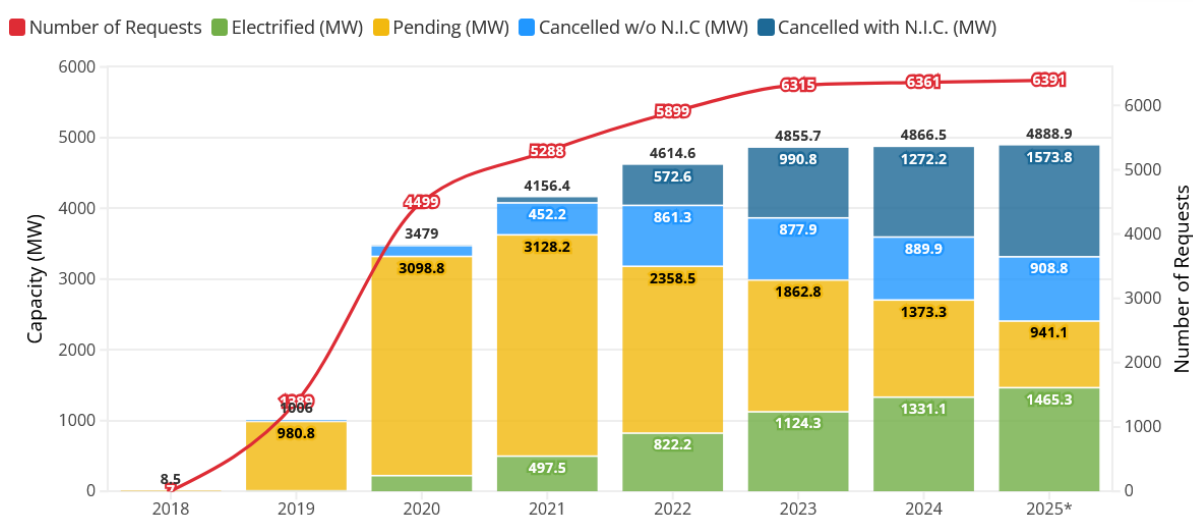
⁴ The term "active" refers to the GEMI's classification, without necessarily meaning that every "active" energy community has submitted a project request or has proceeded with implementation.

⁵ It is emphasized that projects belonging to "former" energy communities are not included in the 'commercial projects' category.

connection of 290 projects with a capacity of 206.9 MW (+18.4% compared to the previous year). In the first nine months of 2025, 172 energy community projects (134.1 MW) were connected, mirroring the electrification rate of the respective period in 2024 (182 projects with a capacity of 129.5 MW).

In addition, **energy community project cancellations have outnumbered electrifications**. Specifically, 607 projects with a capacity of 434.8 MW were cancelled in 2023, while 365 projects with a capacity of 293.5 MW were cancelled in 2024; in the first nine months of 2025, cancelled projects amounted to 441 with a capacity of 320.5 MW. **The vast majority of the cancelled capacity from 2023 to date (1,001.2 MW out of 1,048.7 MW or 95.5%) corresponds to projects that had been previously notified of inability to connect by the HEDNO.** Since the founding Law for Energy Communities in 2018 to date, a total of 3,208 projects with a capacity of 2,482.6 MW have been cancelled; of these, 1,984 projects (1,573.8 MW or 63.4% of total cancelled capacity) had received a notification of inability to connect. These figures quantitatively illustrate the fact that insufficient electrical space constitutes a key barrier for citizens to further benefit from the energy community institution.

Evolution of Energy Community Projects



Sources: HEDNO, own calculations • *Data up until September 2025
N.I.C.: Notification of Inability to Connect

Figure 2: Evolution of the number and capacity of renewable energy (RES) project requests by energy communities over the period 2018-2025.

As energy community projects that are either cancelled or electrified increase over time and, at the same time, total requests remain nearly stagnant (see Figure 2), the number of pending projects (non-electrified, non-cancelled) is shrinking. As a result, up to September 2025, 1,158 energy community projects of 941.1 MW have remained pending; of these, 830 projects (662.7 MW) have received a notification of inability to connect, thus limiting their chances of being electrified. In contrast, 269 pending energy community projects (213.2 MW) have signed a connection contract and are at the last licensing stage before activation, thus having a much higher probability of being electrified.

The stagnation in the number and capacity of requests can be attributed to the lack of electrical space, as well as to the modified institutional framework. With regard to commercial projects, institutional changes were on the right track, steering those interested in doing business in the electricity production sector directly to the electricity market, thus reserving the energy community tool for self-producers. In particular, restrictions were applied regarding profit sharing among members⁶, while the high prices guaranteed for electricity producers running commercial energy community projects were abolished (with exceptions⁷). Consequently, of the 5,658 commercial project requests (88.7% of total project requests by energy communities) on record until September 2025, only 34 were submitted from 2022 onwards⁸.

In contrast to commercial projects, requests for self-production projects implementing virtual net-metering surged from 30 in 2021 to 228 in 2022, and further increased 2.5 times, reaching 569 in 2023. However, this progress was abruptly halted by an institutional framework amendment abolishing virtual net-metering and replacing it -at a significant delay- by virtual net-billing. Compared to virtual net-metering, this new mechanism has significantly fewer economic benefits for energy community members, as the compensation price of the surplus energy produced during the day is far inferior to that of night-time peak hours, which is no longer offset. As a result, of the 613 virtual net-metering requests currently on record, only 44 were submitted in 2024 (all by April); no new requests were submitted within 2025, due to the complete abolition of this mechanism for energy communities as of November 2024.

Finally, since the HEDNO announced that it would start accepting (virtual) net-billing requests in October 2024⁹, energy communities have submitted just 18 project requests totaling 7.2 MW; this figure is indicative of the difficulties energy communities face in utilizing the new mechanism.

Geographical Distribution

As illustrated in Figure 3, since the founding law for energy communities in 2018 and up to November 2025, **most were established in the Region of Central Macedonia (297). The latter also boasts the largest electrified capacity (354.5 MW)**, followed by Thessaly (270 MW) and Eastern Macedonia & Thrace (234.7 MW).

The lignite region of Western Macedonia boasts the second largest number of energy communities (275) -albeit ranking 6th with regard to electrified capacity (104 MW). Next in

⁶ Law no. 5037/2023 GG A 78/29.3.2023

⁷ e.g. Law no. 5167/2024 GG A 207/20.12.2024

⁸ Of particular interest is the small increase in new requests for energy community commercial projects recorded over the first quarter of 2025. The 11 new requests all relate to wind farms located in Evia, in the municipalities of Kyri-Ativeri (10 projects) and Karystia (1 project), each with a capacity of 1MW. These projects correspond to 2 energy communities; ten requests were submitted on the same day (10/1/2025), while the eleventh was submitted 12 days later. Nonetheless, all projects received a notification of inability to connect by the HEDNO on 1/9/25.

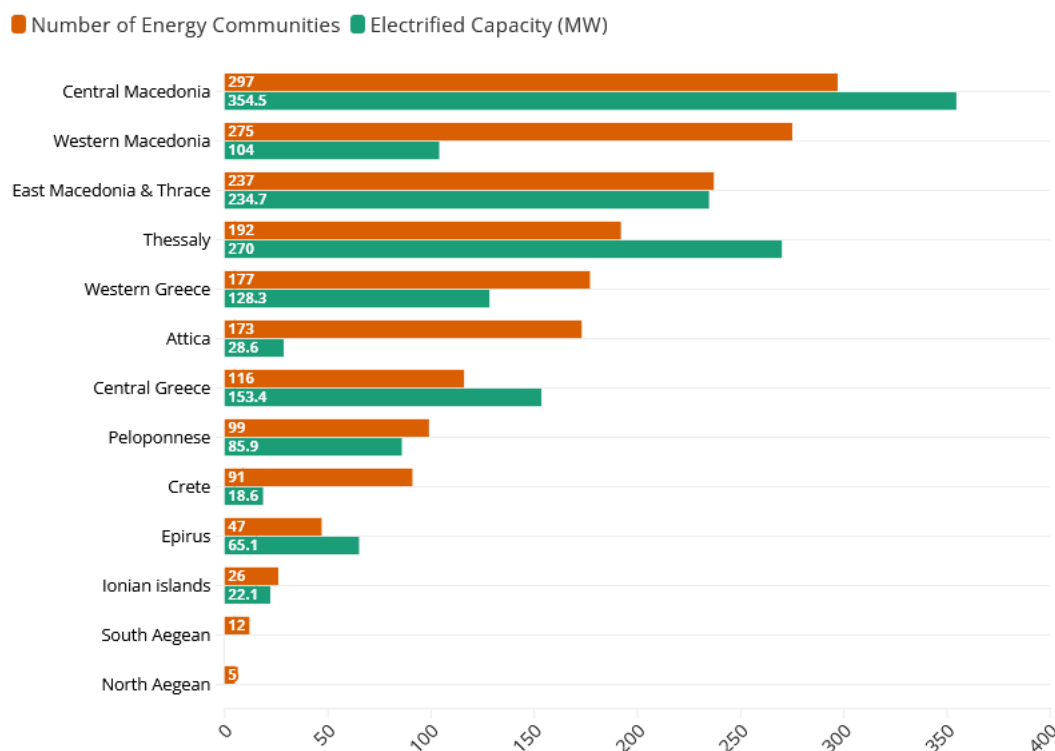
⁹ HEDNO's announcement with regard to accepting net-billing requests, 2.10.2024, <https://bit.ly/42O1SBw>.

rank with 237 energy communities is Eastern Macedonia & Thrace, followed by Thessaly and Western Greece, with 192 and 177 energy communities, respectively.

With regard to the islands, the largest number of energy communities has been established in Crete (91). However, the highest electrified capacity is recorded on the Ionian Islands: 22.1 MW, compared to 18.6 MW in Crete. Nonetheless, all electrified projects in Crete are for self-production, while the electrified capacity in the Ionian Islands stems from commercial projects.

Energy Communities across Regions

September 2025



Sources: ΔΕΔΔΗΕ, GEMI, own calculations

Data on capacities up until September 2025, data on number of Energy Communities up until November 2025

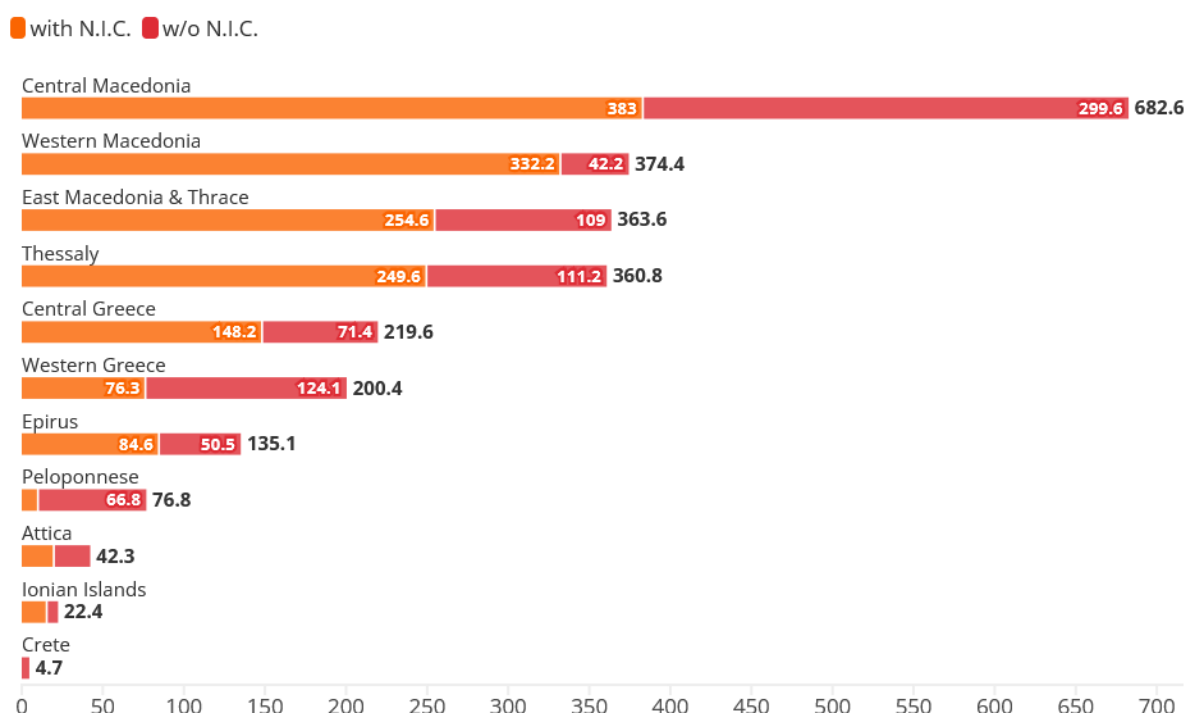
Figure 3: Number of energy communities and electrified capacity by Region.

Figure 4 reveals that, in addition to the number of energy communities and electrified capacity, **Central Macedonia also records the highest number of cancelled projects; furthermore, the latter have almost twice as much capacity (682.6 MW) as electrified projects (354.5 MW).** More than half (56%) of cancelled projects (383 MW) had previously received a notification of inability to connect to the grid.

Western Macedonia ranks second with regard to cancelled projects' capacity (374.4 MW), while also holding two national -negative- distinctions. Firstly, this region logs the highest ratio of cancelled to electrified capacity, as the former (374.4 MW) nearly quadruples the latter (104 MW). Secondly, as illustrated in Figure 4, Western Macedonia holds the highest share of cancelled projects that had received a notification of inability to connect from the HEDNO prior to cancellation (88.7%).

Eastern Macedonia & Thrace and Thessaly rank in third and fourth place, respectively, with comparable amounts of both total cancelled capacity (363.6 MW and 360.8 MW, respectively) and capacity of projects that had received a notification of inability to connect prior to cancellation (254.6 MW and 249.6 MW, respectively).

Regional distribution of cancelled EnCom projects



Sources: HEDNO, own calculations • *Data up until September 2025

N.I.C.: Notification of Inability to Connect

Figure 4: Capacity of cancelled energy community projects by Region, with and without a Notification of Inability to Connect.

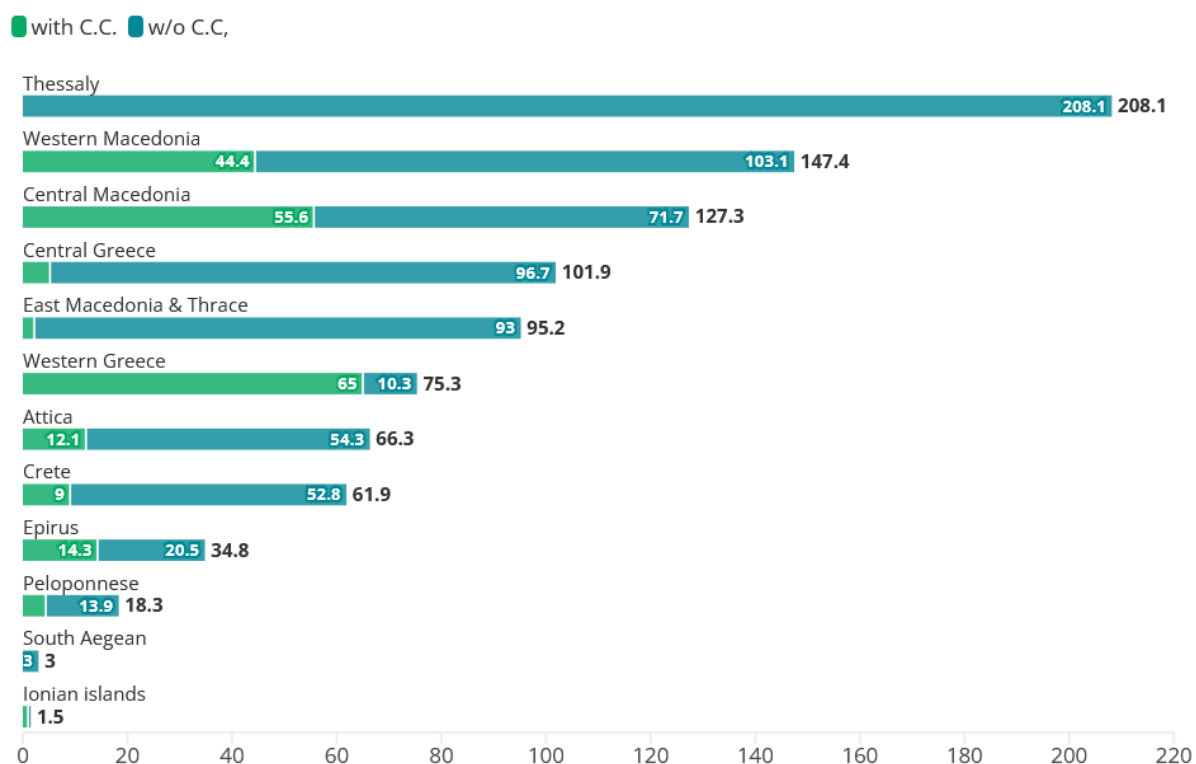
Of particular interest is the geographic distribution of pending energy community projects (namely, those that have neither been electrified nor cancelled), both overall and specifically with regard to the subset of pending projects that have secured a connection contract. As the latter represents the final licensing stage before activation, these projects are closest to implementation and can be considered as the most ‘mature’.

As illustrated in Figure 5, the largest capacity of pending energy community projects is recorded in Thessaly (208.1 MW). However, none of the 229 pending projects, 221 of which are commercial, has a connection contract.

The Region of Western Macedonia ranks second with 147.4 MW of pending capacity, which corresponds to 196 projects, 60 of which (44.4 MW) have a connection contract. It is worth noting that, among the latter subset, 10 (8 MW) are self-production projects applying virtual net-metering, while the rest are commercial. Next in rank are the Regions of Central Macedonia and Eastern Macedonia & Thrace with a pending capacity of 127.3 MW and 101.9 MW, respectively.

The Region of Western Greece records the highest percentage of pending projects with a connection contract (65 MW out of a total of 75.3 MW of pending capacity, or 86.3; this region is followed by Central Macedonia with 55.6 MW of pending projects with a connection contract out of a total of 127.3 MW of pending capacity (43.7%).

Regional distribution of pending EnCom projects



Sources: HEDNO, own calculations • *Data up until September 2025

C.C.: Connection Contract

Figure 5: Pending energy community project capacity by Region with and without a Connection Contract.

Regions in Transition

Regions in transition are lignite regions and, more broadly, carbon-intensive regions covered by the Just Transition Fund and for which a Territorial Just Transition Plan (TJTP) has been developed and approved. In Greece, these are the lignite regions of Western Macedonia (Kozani, Ptolemaida, Amyntaio, Florina); the Municipalities of Megalopolis, Tripoli, and Gortynia in the Regional Unit of Arcadia; the Municipality of Oichalia in the Regional Unit of Messinia, as well as the islands of the Northern and Southern Aegean Sea, and Crete. Specifically for these regions, the first funding program for energy community self-production projects in Greece was announced in September 2023, amounting to €41.8 million¹⁰. Only municipalities and related entities are eligible for funding, while, as a precondition, the relevant projects must have a connection contract already signed with the HEDNO. As a result of these restrictions, the only energy community funded to date -

¹⁰ Just Transition Special Authority (EYDAM), 27.9.2023, Call entitled "Supporting energy communities in developing self-production actions": <https://bit.ly/3HLLiP8>.

more than two years following the call- is that of the municipality of Kozani; the latter has been allocated €5.4 million for the installation of 7 MW of photovoltaic systems to meet the municipality's electricity needs. In addition, the Just Development Transition Program (PDAM) has earmarked €6.4 million to finance the installation of 8.9 MW of photovoltaics by the Municipality of Voio's energy community.

Therefore, it is of particular interest to examine -in all regions in transition- the permitting status *of all self-production projects, namely, those proposed by energy communities, as well as those by self-producers implementing virtual net-metering or, more recently, virtual net-billing, as these projects are potentially eligible for funding under the PDAM 2021-2027.*

Western Macedonia

In Greece's largest lignite region, Western Macedonia, 275 energy communities have been established (marking a decrease, compared to the 294 recorded in April 2025) and have submitted 790 requests for RES projects with a total capacity of 625.8 MW. The majority of requests (756) correspond to commercial projects, while merely 34 requests of 19.8 MW relate to self-production. A total of 155 projects with a capacity of 104 MW have been electrified. In addition, as mentioned above, Western Macedonia holds two unfavorable national distinctions. Firstly, it has the **highest ratio of cancelled to electrified capacity** as the former (374.4 MW) nearly quadruples the latter (104 MW). Secondly, it holds the **highest share of cancelled projects that had received a notification of inability to connect prior to cancellation** (88.7%). Both figures highlight the severity of grid space unavailability in this Region.

Besides the 7 projects (1 MW each) implemented by the energy community of the Municipality of Kozani that will be financed with €5.4 million by the PDAM 2021 - 2027, **this Region also hosts 8 virtual net-metering projects** (3 by energy communities; 4 by the Kozani Water Supply and Sewerage Company (DEYAK); and 1 by a rural enterprise), **with a total capacity of 4.1 MW, that have already signed a connection contract.** Therefore, these projects are at the necessary maturity level to receive funding from the PDAM, provided that the relevant call is amended to extend its scope of beneficiaries; beyond municipalities or related organizations, beneficiaries should include other entities, such as citizen energy communities, small and medium-sized enterprises (SMEs) or farmers that apply virtual net-metering or virtual net-billing.

Finally, since 2 October 2024, when the relevant Joint Ministerial Decision was issued, 15 requests for virtual net billing projects with a capacity of 8.92 MW have been submitted in this Region; none has been electrified yet, while one (7.7 KW) has been canceled. Therefore, 14 requests with a total capacity of 8.92 MW remain pending, 8 of which (7.3 MW) have already received notification of inability to connect; none of the remaining 6 have a connection contract.

Arcadia

In the other lignite region of Greece, Arcadia, 44 energy communities have been established and have submitted requests for 108 projects of 58.2 MW. Of these, 43 are self-production

projects applying virtual net-metering, with a capacity of 8.8 MW. Forty-seven energy community projects with a capacity of 20.8 MW have been electrified, 25 of which are self-production projects (5.3 MW). With regard to virtual net-metering as a whole, 29 projects - including those by energy communities- with a capacity of 5.5 MW have been electrified; only one project of 1 MW remains pending, while having signed a connection contract. Furthermore, of the 9 requests for virtual net billing (1.56 MW) submitted after 2 October 2024, none are yet connected to the grid, while 8 projects (1.53 MW) remain pending.

Messinia

Messinia is home to 10 active energy communities that have submitted requests for 46 projects with a total capacity of 33.3 MW; five are self-production projects with a capacity of 4.5 MW. Electrification is complete for 33 energy community projects (23.5 MW); of the latter, however, merely 5 (4.5 MW) are self-production projects. With regard to virtual net metering as a whole, 6 projects with a capacity of 4.6 MW have been electrified; five (5) of them belong to energy communities. Another 6 self-production projects implementing virtual net metering (4.3 MW) remain pending, 3 of which (2.8 MW) have signed a connection contract. Finally, the two virtual net billing requests (0.34 MW) submitted after 2 October 2024 have neither been electrified nor canceled and, therefore, remain pending.

Crete

Crete hosts 91 active energy communities that have submitted requests for 110 projects with a total capacity of 85.2 MW. It is the only region in Greece where the number of requests for self-production projects by energy communities (53) approximates that for commercial projects (57). Twenty-five (25) energy community self-production projects (18.6 MW) are in operation, all implementing virtual net metering. With regard to virtual net-metering as a whole, 36 projects -including those by energy communities- with a capacity of 20.2 MW have been electrified. Only 2 projects (0.8 MW) remain pending, both with a connection contract. Finally, of the 18 virtual net billing requests (5.14 MW) submitted after 2 October 2024, none have been electrified, while 17 (4.74 MW) remain pending.

Southern Aegean

This region is home to 12 active energy communities. However, the latter have submitted only 4 RES project requests with a total capacity of 3 MW, all commercial, none of which have been connected. One 0.5 MW virtual net-metering project has been electrified, while another 0.5 MW project has a connection contract but has not yet been activated. No virtual net billing requests have been submitted to date.

Northern Aegean

This region is home to 5 active energy communities which, according to the HEDNO's records, have submitted no project requests by September 2025. Nonetheless, the Chios energy community announced that two virtual net-metering projects with a total capacity

of 110 KW were electrified in March and April 2024¹¹, while an energy community in Lesvos announced that a 100 KW virtual net-metering project was connected in February 2025¹².

Table 1, below, presents the capacity of virtual net-metering and virtual net billing projects at different permitting stages in the transition regions. These projects, particularly those that have signed a connection contract, could be funded by the PDAM 2021-2027, provided that the relevant calls are amended to include beneficiaries beyond energy communities set up by municipalities and related entities.

Table 1: Capacity of virtual net metering & virtual net billing projects in transition regions

Region in Transition	Requests (MW)	Electrified (MW)	Pending with a Connection Contract (MW)	Pending without a Connection Contract (MW)
Western Macedonia	26.35	2.48	11.1 ¹³	8.92
Arcadia	14.81	5.55	1	1.53
Messinia	9.34	4.61	2.85	1.76
Crete	40.86	20.2	0.8	4.74
Southern Aegean	1	0.5	0.5	0
Northern Aegean	0	0	0	0
Total	92.37	33.33	16.25	16.95

Self-Production

Self-production projects are implemented by energy communities, as well as -and mainly- by individual households, farmers, businesses, municipalities, and other entities. Following the change in the institutional framework and the HEDNO's relevant announcements, in addition to the two previous mechanisms of net-metering and virtual net-metering, self-producers may also employ the two newer ones, namely net-billing and virtual net-billing.

The analysis of the HEDNO's data -up to September 2025- reveals that **citizens' interest, as reflected in the evolution of requests for self-production projects** (see Figure 6), **has been strongly influenced by the changes in the institutional framework**. Indeed, following a surge of 21,349 new requests for self-production projects in 2023, 2024 saw requests drop at 14,018; furthermore, only 4,728 new requests were submitted during the first nine months of 2025. For comparison purposes, it is noted that almost three times as many new requests for self-production projects (12,901) had been submitted in the first nine months of 2024. The observed slowdown is alarming, nonetheless less severe compared to that noted in energy community project requests, which increased over the 2023-2025 period (up to September 2025) by just 76; of the latter, 62 are self-production projects (see Figure 2).

In particular, following the HEDNO's announcement on 2 October 2024 that it would accept requests for projects applying the two new mechanisms, a total of 5,844 new self-production

¹¹ Chios Energy Community. 18.4.2024. "The PV station developed in the context of the VEC3 Program has been connected", <https://bit.ly/4cXGGgY>.

¹² 'Iliotropio' Energy Community, Lesvos. 27.2.2025. <https://bit.ly/44a9ErD>.

¹³ Including the 7 MW projects implemented by the energy community of the Municipality of Kozani that are being funded by the PDAM 2021-2027.

project requests were submitted (296.3 MW); their distribution across the four mechanisms, both by number and by capacity, is presented in Table 2.

Table 2: Distribution of new requests for self-production projects over the period 2/10/2024 - 30/9/2025 across the 4 available mechanisms

Mechanism	Number of new requests	% of total requests	Capacity of new requests (MW)	% of total capacity
Net-metering	1292	22.11 %	27.83	9.39 %
Virtual net-metering	22	0.38 %	2.57	0.87 %
Net-billing	4141	70.86 %	188	63.44 %
Virtual net-billing	389 ¹⁴	6.66 %	78	26.32 %

It is clear that the ‘baton’ of self-production is gradually being passed on to the two new net-billing mechanisms (77.5% of new requests and 89.8% of new requested capacity).

Nonetheless, it is worth noting that new requests using the mechanisms of net metering and virtual net metering are still being submitted, even though these schemes were discontinued by Law no. 5151/2024 (Article 28, paragraph 10) as of 31 October 2024¹⁵. These requests are covered by the law’s exemptions, permitting the use of the previous mechanisms, subject to the submission of an application for EU or national funding by 31 October 2024.

With regard to electrified capacity, 36,518 self-production projects with a capacity of 1072.6 MW have been connected nationwide -up to September 2025¹⁶. The vast majority of electrified projects (36,483 projects with a capacity of 1006.6 MW) employ photovoltaic systems¹⁷. The largest part of the total electrified capacity (847.9 MW or 79%) corresponds to 35,618 individual net-metering projects, while 546 virtual net-metering projects (142.4 MW) account for 13.3%¹⁸; moreover, 354 net billing and virtual net billing projects account for the remaining 7.7% of electrified capacity (82.2 MW). Nonetheless, only 16.5 MW of the latter correspond to requests submitted after the Joint Ministerial Decision came into force (2/10/2024).

¹⁴ Only 18 new requests for projects employing this mechanism were submitted by energy communities since October 2024.

¹⁵ 1,271 requests were submitted after 31/10/2024 (out of 1,292 submitted after 2/10/2024) using the net metering mechanism, while 7 requests were submitted after 31/10/2024 (out of 22 submitted after 2/10/2024) using the virtual net metering mechanism.

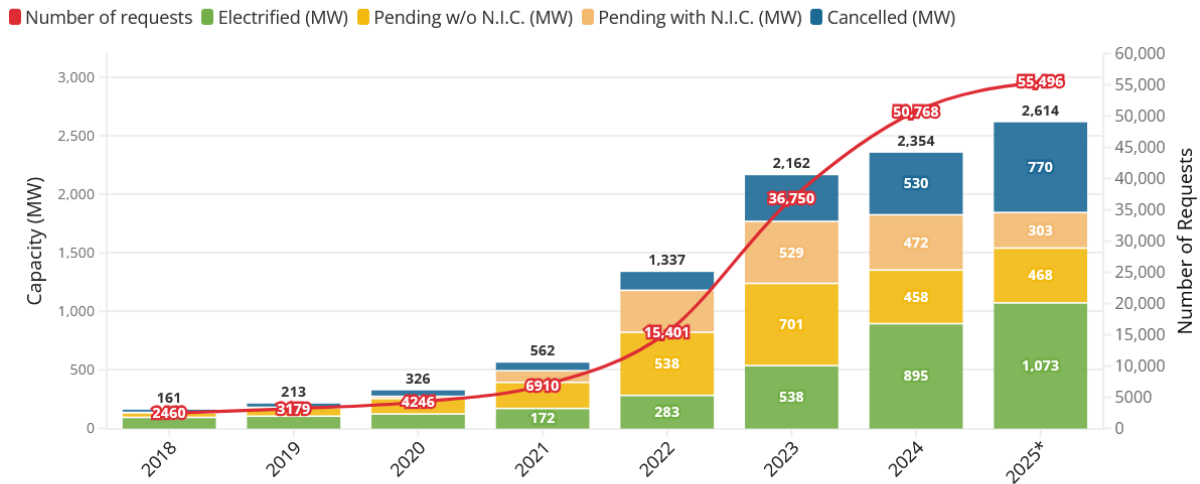
¹⁶According to the HEDNO’s monthly reports on the non-interconnected islands, 19.42 MW of net metering systems were operating in the Southern and Northern Aegean Regions up to April 2025. However, the most recent data (October 2025), found in HEDNO’s Net Metering Archive, indicate that only 3.8 MW have been installed in these Regions. This report is based exclusively on the data presented in the HEDNO’s centralized Net Metering Archive.

¹⁷ Based on the latest data by the Independent Power Transmission Operator (IPTO) on high voltage and by the HEDNO on low and medium voltage, there are 11,355.3 MW of photovoltaics operating nationwide. Therefore, the capacity of self-production photovoltaic systems corresponds to 8.9% of the country’s total installed PV capacity.

¹⁸ The largest part (101.4 MW) of the electrified capacity of virtual net-metering projects corresponds to 194 energy community projects.

Evolution of self-production projects

(Virtual) Net Metering and (Virtual) Net Billing



Sources: HEDNO, own calculations • *Data up until September 2025
N.I.C.: Notification of Inability to Connect

Figure 6: Capacity of self-production projects by citizens, entities, and energy communities (net metering; virtual net metering; net billing; virtual net billing), at different permitting stages: electrified; cancelled; and pending (with or without Notification of Inability to Connect), over the period 2018 - September 2025.

As illustrated in Figure 6, progress in the electrification of self-production projects continued throughout 2024, as 16,289 new projects were connected; their cumulative capacity of 357.5 MW represented a significant increase over the 254.3 MW connected throughout 2023. Nonetheless, given that merely 5,244 new self-production projects (177.5 MW) were connected during the first nine months of 2025, the electrification pace appears to be slowing down.

In contrast to the trend observed with regard to energy community projects (see Figure 2), electrification of self-production projects exceeded cancellations; in September 2025 the relevant cancelled capacity amounted to 769.7 MW.

The capacity of self-production projects that remain pending (namely, neither electrified nor cancelled) has dropped from 929.4 MW at the end of 2024 to 771.5 MW (-17%). Moreover, the capacity of pending projects not yet notified of inability to connect, which have better prospects to be electrified, amounts to (468.2 MW), exceeding that of projects already notified (303.3 MW).

Consequently, the cumulative capacity of both pending and electrified self-production projects amounts to 1,844 MW, thus approaching the 2 GW of electrical space reserved for self-production projects, as provided by Law no. 5037/2023.

Funding

The **€5.4 million** granted by the PDAM 2021-2027 to the energy community of the Municipality of Kozani constitute the only public resources channeled to date for the development of energy community projects; the aforementioned grant will finance the installation of photovoltaic systems, totaling 7 MW, intended to meet the municipality's electricity needs¹⁹. According to the latest announcements by the Just Transition Special Authority (EYDAM), the PDAM has recently allocated an additional **€6.37 million** to the energy community of the Municipality of Voio for the implementation of self-production projects (8.9 MW)²⁰.

Unfortunately, Greece forfeited the opportunity to allocate €100 million from the Recovery and Resilience Fund (RRF) to self-production projects by energy communities of vulnerable citizens under the “Apollon” program²¹. This unfavorable outcome resulted from significant delays that rendered project completion by the RRF's August 2026 deadline unfeasible.

An additional adverse development affecting energy communities was their exclusion from the list of beneficiaries under the draft National Social Climate Plan submitted by the government for public consultation²²; this decision was indeed criticized by environmental organizations^{23,24}.

Furthermore, the European Union issued a call for proposals for its European Energy Communities Facility (EECF) program; the latter is budgeted at €3 million and offers grants of up to **€45,000** to energy communities for the development of business plans for RES production projects. By the deadline (30 September 2025), the program had received 690 applications from all 31 eligible countries (27 EU member states; Iceland; Moldova; North Macedonia; and Ukraine)²⁵. Finally, the European Commission announced a **€1 million** prize to reward innovative models of energy community governance. Beneficiaries are EU-based RECs and CECs with up to 10,000 members, applying democratic, participatory, and just practices in decision-making and profit distribution. The main objective is to strengthen citizens' active participation in the energy transition and to highlight good practices; the deadline for applications is 25 June 2026²⁶.

¹⁹ The Green Tank (2024) “Energy Communities and Self-Production in Greece #6” <https://shorturl.at/PaeOz>.

²⁰ Inclusion of the Action “SELF-PRODUCTION OF ENERGY USING PHOTOVOLTAIC SYSTEMS BY THE VOIO 1 ENERGY COMMUNITY AND THE VOIO 2 ENERGY COMMUNITY” (MIS 6007002) under the “Just Development Transition Program 2021-2027”, 21/08/2025. <https://bit.ly/3MFOOJR>

²¹ 4th Amendment to the Decision to Include the Project “Saving at Home - Cycles 2021, 2022” (MIS 5150059) under the Recovery and Resilience Fund, where it is stated that the amendment is made “due to the removal of sub-project 14, entitled *Program to support municipal energy communities to produce energy to be distributed to households in energy poverty* budgeted at €100,000,000.00”, <https://bit.ly/3KKWWbC>

²² Social Climate Plan, public consultation text by the Vice-President of the Government <https://bit.ly/4oXF1MB>

²³ The Green Tank, 15.7.2025. “Comments and recommendations by The Green Tank on the Social Climate Plan public consultation” <https://shorturl.at/J072X>

²⁴ Energy Communities Coalition, 16.7.2025. “Public Consultation - Social Climate Plan” <https://bit.ly/4400bG7>

²⁵ EECF, 1/10/2025. “690 energy communities apply to our first call for proposals”. <https://bit.ly/4q0CxOs>

²⁶ European Commission, “Prize Governance Innovations in Energy Communities” <https://bit.ly/4p3dg5s>.

With regard to self-production outside energy communities, projects under the “Photovoltaics in the Field” and “Photovoltaics on the Roof” programs have been granted an extension for completion until April 2026; these programs are funded by the RRF with €30 million and €208 million, respectively²⁷. The deadline for submitting applications for the “Photovoltaics in the Field” program was May 15, 2024, while the deadline for the “Photovoltaics on the Roof” program expired on March 8, 2025. Finally, 30 September 2025 marked the deadline for applications to receive funding from the RRF’s “Storage Systems in Businesses” program; the latter, budgeted at €153.7 million, provides grants to enterprises -regardless of size and sector of economic activity- for the installation of batteries in planned or existing photovoltaic systems, subsidizing exclusively the storage system.

Developments in the Institutional Framework

In the period following the Green Tank’s latest review (April 2025), the European Commission began preparing a Citizens Energy Package²⁸. This initiative aims to accelerate the transition to cleaner energy sources, while ensuring that this transition is just, with all citizens actively participating and being fully protected. In this context, the Commission issued a public call for evidence and responses to a relevant questionnaire. The 12-week consultation -in which Green Tank participated by providing detailed comments²⁹- was addressed to a wide range of stakeholders, including consumer organizations; regulatory authorities; sector representatives; local and regional administrations; and, in particular, citizens. Based on the data gathered from these processes, the Commission intends to issue a communication on the Citizens Energy Package in late 2025.

Moreover, at national level, the Ministry of Environment and Energy (YPEN)’s bill entitled: *“Regulations for the capture, use, transport, and storage of carbon dioxide - Incorporation of Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006 (L 140)”* was recently adopted, containing provisions in seven articles that indirectly affect self-production and energy communities. Several of these provisions favor large-scale RES and storage development over smaller self-production projects³⁰.

In particular, Article 56 introduces significant changes regarding the addition of storage installations to RES projects. Pursuant to this article, all new requests for photovoltaic stations (including self-production projects) must include a battery with a usable capacity of at least one hour of the station’s installed capacity, with the submission of new requests starting on 1 April 2026. Should they wish and where technically feasible, existing projects

²⁷ Ministry of Environment and Energy, 19.9.2025. “The Ministry of Environment and Energy announces extensions granted to energy programs under the Recovery and Resilience Fund”, <https://bit.ly/45aw0sy>

²⁸ European Commission, 19.6.2025. “Citizens Energy Package: Commission starts consultation process”, <https://bit.ly/4se8y7Z>

²⁹ The Green Tank, 10.9.2025, “Just Energy Transition: The Green Tank’s Positions on the EU Citizens Energy Package”, <https://shorturl.at/VFgH8>

³⁰ The Green Tank, 19.11.2025, “The Green Tank comments on the draft law on carbon capture and storage (CSS) & energy market provisions”, <https://shorturl.at/uMje4>

(namely, projects that either became operational after 4 July 2019; or are new photovoltaic stations that have received a final connection offer and have not become operational by 1 December 2025; or are new photovoltaic stations that will receive a final connection offer) may also include storage by submitting a relevant request to the network operator, with no set deadline.

Furthermore, Article 59 explicitly addresses energy communities and seeks to prevent the “abuse” of this institution, namely, cases where the same legal or natural persons participate in multiple energy communities receiving state aid through the Renewable Energy Sources Operator & Guarantees of Origin (DAPEEP), thus, effectively operating as large enterprises rather than collective, local ventures. Specifically, the new law prohibits legal entities participating as members in an energy community of any form (energy community under Law no. 4513/2018; REC; or CEC) that has entered into, or intends to enter into, an Operational Support Agreement with DAPEEP from being linked to a natural or legal person who directly or indirectly participates in the management of the energy community or holds a stake -regardless of size- as a shareholder, partner, or member of a legal entity. This article also applies retroactively; therefore, existing communities are required to comply by adjusting their membership structure within 24 months.

It is worth noting that this regulation was **preceded by a complaint by the Hellenic Ornithological Society**, which was supported by 22 environmental organizations, regarding the Cypriot company AIMS32 CORPORATION LIMITED; allegedly, the latter participates in seven energy communities through companies in which it is the sole partner, thus, abusing the energy communities’ framework in order to install 15 wind farms that bypass competition and environmental legislation³¹.

A positive outcome of the bill’s consultation was the exemption of certain entities from the scope of this specific provision, and in particular, agricultural and urban cooperatives under Law no. 1667/1986 and their subsidiaries, local and regional authorities and their legal entities, as well as their associations already participating in energy communities, and already established energy communities that operate exclusively self-consumption stations, without having entered into or intending to enter into an Operational Support Agreement with DAPEEP or HEDNO (in the non-interconnected islands network).

Parliamentary Scrutiny

In the period following the previous Green Tank review (April 2025), the issues addressed in Parliament included the economic burdens on farmers resulting from the implementation of the “Photovoltaics in the Field” program; the lack of government support for the institution of energy communities and self-production; as well as the forfeiture of €100 million of RRF resources intended for the energy community of vulnerable citizens under the “Apollon” program.

³¹ Hellenic Ornithological Society, 9.4.2025. “22 environmental organizations call for the immediate revocation of permits for 15 wind farms in the Acarnanian Mountains”, <https://bit.ly/45azPxU>; joint press release, 10.4.25, <https://shorturl.at/dlZF6>

A total of 10 relevant parliamentary questions were submitted: 4 by PASOK - Movement for Change; 4 by the Coalition for the Radical Left (SYRIZA); and 2 by Nea Aristera (New Left); of these, only one remains unanswered.

A SYRIZA MP -along with New Left MPs- questioned the Ministry of Environment and Energy regarding changes to the terms of the “Photovoltaics in the Field” program that disadvantage farmers. Specifically, the question concerned the HEDNO’s granting of connection terms to farmers on the condition of “no injection into the grid” at a rate of 50%, contrary to the announcements of the relevant program; this condition significantly deprives beneficiaries of revenue that would otherwise be generated through the sale of injected electricity^{32,33}. In his response, the Deputy Minister of Environment and Energy explained that the “no injection into the grid” clause condition does not affect 50% of projects, as mentioned in the question, but only 13% of the 774 projects covered by the program (in operation, with a connection contract, and “close” to having a connection contract), namely, 120 projects. Moreover, he stressed that, from the outset, the program specified that injection into the grid shall be subject to grid availability³⁴.

A SYRIZA MP accused the government of failing to support energy communities and undermining energy democracy, citing data presented in the previous Green Tank review³⁵, which indicated that merely 4.4% of energy community projects involved self-production, while the rest were commercial in nature³⁶. In his response, the Deputy Minister of Environment and Energy did not dispute this assessment, which indicates a bias in favor of commercial projects; nonetheless, he cited data from the aforementioned Green Tank review to highlight the progress made in connecting energy community projects (both commercial and self-production) under the current New Democracy government, resulting in a total of nearly 1.4 GW in April 2025³⁷.

A PASOK MP denounced the challenges and injustices that self-producers face due to the HEDNO’s malfunctions, referring to the additional interconnection costs that self-producers are forced to bear -often more than once- due to the transition from net metering to net billing³⁸. In its response, the HEDNO refuted the MP’s claim, stating that the connection fee remained unchanged during the implementation of net billing and is to be refunded only if the Connection Agreement has not been approved and signed. In addition, regarding the commitment of at least 20% of grid space for self-production projects, which was raised by the PASOK MP, the HEDNO responded that it now only accepts and evaluates requests relating to self-production stations. It further clarified, however, that the ability to connect these projects depends on their requested capacity, the capacity of previous requests that have reserved electrical space, as well as on the topology of the grid³⁹.

³² Hellenic Parliament (2025), Question by V. Kokkalis, <https://bit.ly/3YecOqh>

³³ Hellenic Parliament (2025), Question by P. Perka and 6 MPs, <https://bit.ly/4iTy4Le>

³⁴ Parliamentary Proceedings (5.5.2025) <https://bit.ly/4pG94d4>

³⁵ The Green Tank (2025) “Energy communities & self-production in Greece #7” <https://shorturl.at/ENw1i>

³⁶ Hellenic Parliament (2025), Question by M. Zabarar, <https://bit.ly/4abZiuk>

³⁷ Parliamentary Proceedings (20.6.2025), <https://bit.ly/4pVQA8J>

³⁸ Hellenic Parliament (2025), Question by F. Parasiris, <https://bit.ly/48DP98H>

³⁹ HEDNO’s response to the question by F. Parasyris <https://bit.ly/4aLUWu3>

The forfeiture of €100 million in funds from the Recovery and Resilience Fund intended to finance self-production projects by the energy community of vulnerable citizens under the “Apollon” program was raised by several MPs from PASOK, SYRIZA, and New Left^{40,41,42,43}. In his response, the Deputy Minister of Environment and Energy admitted that the projects could not be completed within the set deadlines, leading to the project's exclusion from the RRF; he further specified that these RRF resources were transferred to the “Economize” and “Changing Heating System and Water Heater” programs⁴⁴.

A SYRIZA MP recommended reinstating the net metering and virtual net metering schemes for certain groups, such as vulnerable households, municipal buildings, and broad-based energy communities. He also inquired regarding the available grid space to be reserved in Crete for self-production projects under the new net billing mechanism⁴⁵. This question has not yet been answered.

A PASOK MP criticized the government for the prolonged, detrimental and unjustified delays in implementing the net billing system, as well as for the lack of a regulatory framework; moreover, he requested the establishment of an online portal to facilitate communication among stakeholders (HEDNO; electricity suppliers; self-producers; competent public services) and immediately resolve self-producers' queries and technical difficulties⁴⁶. In his response, the Deputy Minister of Environment and Energy emphasized that a regulatory framework for net billing does exist, while, nationwide, approximately 1,000 MW and 85 MW of projects are implementing, respectively, the old net metering and the new net billing schemes⁴⁷. Nevertheless, he acknowledged gaps in the implementation of net billing, especially regarding the tripartite agreement signed by self-producers with DAPEEP and HEDNO, while referring to the government's efforts to resolve them⁴⁸.

⁴⁰ Hellenic Parliament (2025), Question by F. Parasiris, <https://bit.ly/4q4dp9B>

⁴¹ Hellenic Parliament (2025), Question by P. Perka, <https://bit.ly/4j0aLj0>

⁴² Hellenic Parliament (2025), Question by M. Zabarar, <https://bit.ly/3MDwBg4>

⁴³ Hellenic Parliament (2025), Question by K. Spiridaki, <https://bit.ly/3Mzo2Ty>

⁴⁴ Parliamentary Proceedings (1.12.2025), <https://bit.ly/4aPicHE>

⁴⁵ Hellenic Parliament (2025), Question by C. Mamoulakis, <https://bit.ly/4pAWTxY>

⁴⁶ Hellenic Parliament (2025), Question by S. Michailidis <https://bit.ly/4qeMwQF>

⁴⁷ By September 2025, 990.4 MW of self-production projects implementing the former schemes had indeed been electrified (848 MW using net metering and 142.4 MW using virtual net metering), along with 82.2 MW of self-production projects implementing the net billing mechanism (81.9 MW using net billing and 0.3 MW using virtual net billing). However, it should be noted that the vast majority of the electrified capacity of projects under the new mechanism has been carried over from projects originally submitted under the previous mechanisms. As of 2/10/2024, when the Joint Ministerial Decision implementing the new net billing mechanism came into force, only 16.5 MW (out of a total of 82.2 MW) of projects have been connected, reflecting the slowdown caused by the shift from net metering to net billing.

⁴⁸ Parliamentary Proceedings (3.11.2025), <https://bit.ly/4pJymXU>

Policy Recommendations

The data show that, beyond existing obstacles (insufficient funding and limited grid space), additional delays in the implementation of (virtual) net billing, as well as longer payback periods for these investments, have reduced the interest of citizens, organizations, and businesses in self-production and energy community projects. In order to reverse this negative trend and promote a truly just energy transition, The Green Tank submits the following recommendations:

Project funding and financial support

- Energy community projects should be included among the beneficiaries of both the **Social Climate Fund** and the revenues from ETS-2 (buildings and road transport) emissions auctions.
- A new program should be designed to support self-production projects by citizens' and businesses' energy communities, as well as by farmers, particularly for the lignite regions, drawing on **PDAM 2021-2027** resources, in line with the corresponding call for municipalities and related entities.
- A **guarantee mechanism or development fund** should be established to aid access to loans, project maturation, and storage infrastructure installation.

Electricity space

- The grid space reserved for self-production should be **expanded to 3 GW by 2030**.
- A distinct capacity category should be set per substation (2 MW) for energy community self-production projects.
- The maximum absorption capacity per energy community self-production project should be readjusted to 1 MW.

Alignment with existing or upcoming EU directives/frameworks

- The revised RES Directive (RED III) should be incorporated and **energy sharing** should be implemented, extending the possibilities offered by the existing national institutional framework for shared consumption exclusively at apartment building level.
- **Building on EU signals conveyed through the Citizens Energy Package and the Grids Package**, the State should take the lead in implementing key policy measures for energy communities and RES projects, such as the establishment of mandatory **benefit-sharing** mechanisms for projects over 10 MW and the acceleration of licensing for small photovoltaic systems with batteries.

Education, information, and transparency

- **One-stop shops** should be established at municipal level, so as to inform citizens of energy production options and participation in energy communities.
- **Cost/benefit calculation** tools should be developed for energy communities and self-production, providing citizens with adequate information to make informed participation decisions.

