50 Vas. Sofias Avenue, Athens 11528
T. 210 7233384
https://thegreentank.gr
E-mail: info@thegreentank.gr

January 21, 2026

The Green Tank's input to the European Commission for the upcoming EU Semester report and recommendations

I. Retail electricity prices

In the latest Semester Report, it is stated that *"Greece has taken steps to increase price competition in the retail sector, for example by creating an online price-comparison tool and making it easier for customers to switch their electricity provider."*

While such an online comparison tool does exist, its impact on effective competition appears largely formal rather than real. A closer look at market data suggests that competition in the Greek retail electricity market remains weak.

First, since the introduction of the new tariff system in January 2024, the market shares of the five vertically integrated utilities have remained virtually unchanged across all tariff types according to Annual and Monthly Retail Electricity Reports from RAAEY. This lack of movement indicates that increased switching and competitive pressure have not materialised in practice.

Second, and more importantly, so-called Green (special) tariffs continue to dominate the market, accounting for around 65% of total contracts on average in 2025 (down from ~80% in 2024), despite being significantly more expensive than alternative tariff types, notably Yellow (Variable) and Blue (fixed) tariffs. This outcome is largely the result of the automatic transfer of consumers to green tariffs on 1 January 2024, when the new tariff framework was introduced. This strongly suggests that a large share of consumers still struggle to understand the new pricing system. A market that relies on consumer misunderstanding cannot be considered well-functioning, nor can it effectively promote competition or lead to lower electricity bills for Greek households.

Third, utilities' commercial strategies increasingly steer consumers toward long-term contracts under Blue (fixed) tariffs. This is evident from the limited competitiveness of monthly Yellow tariff products, whose market share has fallen below 15%, while blue tariffs have grown to over 20%, according to the latest available data (Monthly Retail Electricity Market Report - October 2025). Moreover, price differentiation among Blue tariff products across suppliers is minimal, indicating a lack of meaningful competition between utilities.

Finally, the rollout of dynamic (Orange) tariffs—linked to hourly intraday prices—has been significantly delayed by both the State and electricity suppliers. This is despite the installation of more than one million smart meters and the recognition of demand shifting as a key tool to address increasing renewable energy curtailment, reducing fossil gas consumption, and ultimately lowering electricity prices for consumers.

50 Vas. Sofias Avenue, Athens 11528
T. 210 7233384
https://thegreentank.gr
E-mail: info@thegreentank.gr

In light of the above, we believe that the European Commission should recommend that the Greek authorities:

a) Design and implement a comprehensive information campaign to help consumers understand and choose electricity products effectively.
b) Require power utilities to present their products in a uniform and transparent manner each month, potentially including standardised contract types per tariff category.
c) Actively promote the development and uptake of dynamic (Orange) tariffs to encourage consumption during hours of abundant and low-cost solar generation.
d) Accelerate the deployment of smart meters.
e) Closely monitor the functioning of the retail electricity market, with particular vigilance against cartel-like practices—such as price-fixing—that undermine competition and increase consumer costs.
   We recommend this latter measure because we agree 100% with what you wrote, in the last semester's report, admittedly in a broader context, namely that "***Independent authorities, including market regulators, are critical for an effective and consistent regulatory framework***".

II. The relationship between gas, electricity exports, carbon footprint, RES curtailments and DAM prices

Gas and electricity exports

In the latest Semester Report, it is stated that "*the continued increase in renewable energy sources has made Greece a net electricity exporter.*" This statement, however, captures only a limited part of the overall picture. A more comprehensive assessment based on our monthly analyses of trends in the electricity sector, shows that the recent increase in electricity exports is driven primarily by higher fossil gas-based generation rather than by renewables.

Specifically, based on data from the Greek Independent Power Transmission Operator (IPTO) and ENTSO-E, we saw that net electricity exports increased by 2.7 TWh between 2024 and 2025. We further discovered that the largest share of this increase—approximately 2 TWh—was covered by additional fossil gas-fired electricity generation, while the contribution from renewables was significantly smaller, with wind and photovoltaic generation increasing by less than 1 TWh over the same period. In fact, months of highest gas use for power generation coincide with months of highest electricity exports in 2025.

Gas and the carbon footprint of the power sector

The increase in gas-fired generation led to a new historical high in gas-based electricity production, with substantial implications for the carbon footprint of the power sector. Our monthly analyses of the electricity sector's carbon footprint, revealed that in 2025, gas-fired power plants emitted 8.8 Mt of CO_2, accounting for 56% of total electricity-sector emissions. The rise in gas-related emissions was sufficiently large to fully offset the

50 Vas. Sofias Avenue, Athens 11528
T. 210 7233384
https://thegreentank.gr
E-mail: info@thegreentank.gr

reductions achieved through the continued decline in lignite-based generation, which reached a historical low.

As a result, total electricity-sector emissions remained effectively stagnant year-on-year at 15.8 Mt of CO_2 in 2025. This level exceeds Greece's 2025 National Energy and Climate Plan (NECP) target of 10.2 Mt by approximately 55%. Given that the NECP foresees total power-sector emissions of just 4 Mt by 2030, this trajectory is incompatible with Greece's legally binding national objective of achieving at least a 55% reduction in greenhouse gas emissions compared to 1990 levels, as mandated by the National Climate Law.

Gas use and day-ahead market prices

Moreover, the increased reliance on gas-fired generation has been a key driver of higher wholesale electricity prices[1]. In 2025, average day-ahead market (DAM) prices increased on a year-on-year basis compared to 2024 (from 100.9 to 103.6 €/MWh). Notably, the largest monthly increases in DAM prices coincided with periods of elevated gas use, particularly in January, February, and August. This concurrence underscores the continued role of gas as the marginal price-setting technology in the Greek electricity market as well as its impact on the volatility of electricity prices in Greece, as we have also showed in our recent analysis "What is causing the high electricity prices?".

The lack of energy storage boosts renewable energy curtailments & gas dependency

At the same time, the lack of adequate energy storage infrastructure, combined with insufficient incentives to shift demand toward hours of high renewable generation—especially midday solar production—has led to a sharp rise in renewable energy curtailments. According to our analysis based on the Greek IPTO's ISP data, curtailments increased from 899 GWh in 2024 to 1,863 GWh in 2025, more than doubling within a single year. As a consequence, large volumes of low-cost renewable electricity are effectively wasted during daylight hours, while more expensive gas-fired generation is relied upon during evening and nighttime hours to meet demand. This dynamic further entrenches gas dependency and places upward pressure on electricity prices.

In summary:

1. The recent increase in electricity exports is driven predominantly by higher gas-fired generation rather than by growth in renewable energy sources.
2. Electricity exports are not uniformly beneficial for Greece's economy or competitiveness, as is the dominant narrative. This is because gas-based electricity exports benefit electricity producers owning gas-fired plants but increase electricity costs for domestic consumers.
3. Rising renewable energy curtailments negatively affect both renewable producers and wholesale electricity prices by reinforcing reliance on gas-fired generation during evening and nighttime hours, due to insufficient storage capacity and limited demand-shifting mechanisms.

[1] In agreement with the general statement in the last EU Semester report "A major driver of high electricity prices is the still-heavy reliance on natural gas for electricity generation."

50 Vas. Sofias Avenue, Athens 11528
T. 210 7233384
https://thegreentank.gr
E-mail: info@thegreentank.gr

Based on the above analysis, we believe that the European Commission should recommend that the Greek authorities take the following actions:

a) **If a Resource Adequacy Assessment proves that a Capacity Mechanism is indeed necessary, strictly limit any state aid granted to the absolute minimum necessary.** Priority should be given to the establishment of a strategic reserve consisting of existing plants that should be taken out of the electricity market. Only if this proves insufficient should a market-wide Capacity Remuneration Mechanism (CRM) be considered, and in such a case it should be explicitly designed to prioritise energy storage and demand-side response solutions, rather than gas-fired generation as we explain in detail in our recent brief on capacity mechanisms.

b) **Restrict the permitting of new gas-fired power plants on the basis of a comprehensive Resource Adequacy Assessment.** Such an assessment should be subject to a thorough and transparent public consultation process to ensure alignment with Greece's decarbonisation objectives and long-term climate commitments.

c) **Eliminate all legislative and funding barriers for the swift installation of new storage infrastructure** not just large-scale and stand-alone batteries, but also behind-the-meter and smaller scale storage.

III. Energy Communities, Prosumerism & Just Transition

Energy communities and citizen participation

In the latest EU Semester Report, it is stated that *"the number of energy communities is steadily increasing, with 1,742 active energy communities recorded in September 2024."* However, available data do not support the conclusion that the number of energy communities in Greece is steadily increasing.

According to data from the General Commercial Registry (GEMI), which we analyse in our biannual reviews on the status of energy communities and self-production in Greece, the total number of energy communities stood at 1,747 in November 2025. This implies that there has been virtually no net growth over a period exceeding one year, calling into question the characterisation of the trend as "steadily increasing". Moreover, compared to our previous review in April 2025, the number of energy communities established under the two newer legal forms introduced by Law 5037/2023 has declined overall. Specifically, Renewable Energy Communities decreased by 7, while Citizens Energy Communities increased by only 1, resulting in a net decrease of only 6 entities.

Even more concerning is the sharp deceleration in new project development. Since March 2025, only 18 new energy community project applications have been submitted to the Greek Distribution System Operator (HEDNO), and only 76 since January 2024. At the same time, the capacity of cancelled energy community projects (2,482 MW) significantly exceeds the capacity of projects that have been electrified and connected to the grid (1,465 MW). Overall, these indicators point to a deteriorating environment for citizen participation through energy communities.

50 Vas. Sofias Avenue, Athens 11528
T. 210 7233384
https://thegreentank.gr
E-mail: info@thegreentank.gr

Prosumerism and self-production

The outlook for prosumerism and self-production more broadly is equally troubling with a marked slowdown in new project requests: during the first nine months of 2025, only 4,728 new self-production applications were submitted, compared to 12,901 during the corresponding period of 2024, almost three times as many.

In parallel, the transition from net metering to net billing is progressing very slowly. Since the introduction of the new support mechanisms on 2 October 2024 and up to September 2025, nearly 90% of the capacity of newly submitted self-production applications falls under net billing or virtual net billing schemes. However, in absolute terms, the capacity of self-production projects applying to these new mechanisms amounts to just 82.2 MW, representing only 7.7% of total self-production capacity. Of this, only 16.5 MW corresponds to applications submitted after the Joint Ministerial Decision formally entered into force on 2 October 2024.

Overall, these trends indicate that both energy communities and self-production in Greece are facing structural and regulatory barriers that are significantly hindering citizen participation in the energy transition.

Based on the above, and since energy communities and prosumerism constitute the fundamentals of citizens' engagement in a fair and inclusive energy transition, we believe that the European Commission should recommend to the Greek authorities the following:

a. 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.
b. 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.
c. **A guarantee mechanism or development fund** should be established to aid access to loans, project maturation, and storage infrastructure installation.
d. The grid space reserved for self-production should be **expanded to 3 GW by 2030.**
e. Establishment of a distinct category of capacity margin allocation per substation with a total capacity of 2 MW exclusively for self-production projects by energy communities. Adjustment of the maximum absorption capacity per self-production project from energy communities to 1 MW.
f. Subsidies for storage projects and reduction of representation costs, for virtual net billing projects by energy communities of citizens and SMEs.
g. The revised RES Directive (RED III) should be transposed and **energy sharing** should be implemented, extending the possibilities offered by the existing national institutional framework for shared consumption exclusively at apartment building level.
h. Establishment of mandatory **benefit-sharing** mechanisms for projects over 10 MW and the acceleration of licensing for small photovoltaic systems with batteries.

50 Vas. Sofias Avenue, Athens 11528
T. 210 7233384
https://thegreentank.gr
E-mail: info@thegreentank.gr

i. **One-stop shops** should be established at municipal level to inform citizens of energy production options and participation in energy communities.
j. **Cost/benefit calculation** tools should be developed for energy communities and self-production, providing citizens with adequate information to make informed participation decisions.
k. **Systematic updating** and presentation at regular periods of the year of official data on the progress of the relevant projects[2].

IV. Energy Poverty

Greece has recently updated its plan to address energy poverty. While the plan includes several positive elements—such as its emphasis on supporting energy communities and self-production to enhance citizens' participation in the energy transition, as well as its alignment with EU guidelines on the definition of energy poverty— we believe there remains significant room for improvement. In this context, we propose that the European Commission recommend the following actions to the Greek authorities:

a. Strengthen the link between energy poverty and fossil fuel dependence by explicitly accounting for the additional burden arising from ETS2.
b. Ensure alignment between the national energy poverty policy and the National Social Climate Plan, so that the additionality principle with respect to measures and funding sources is fully respected.
c. Include a comprehensive assessment of economic impacts, implementation costs, and funding sources.
d. Reassess the definition of energy-poor households to ensure that all affected groups are adequately captured.
e. Ensure that relief measures cover all vulnerable households, through fair support mechanisms and universal service tariffs that do not lock consumers into higher charges.
f. Include social housing as a core component of the proposed long-term measures to address energy poverty.

[2] Currently, data updates by HEDNO occur at adhoc times once or twice per year