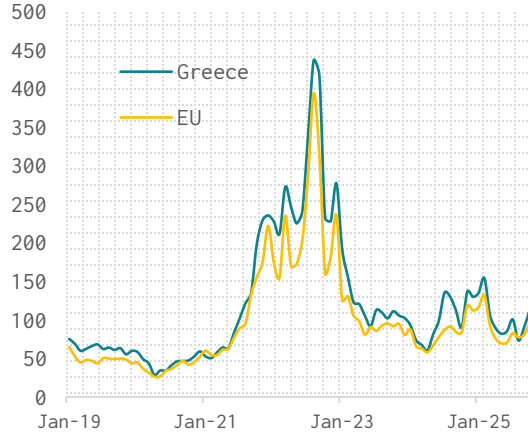
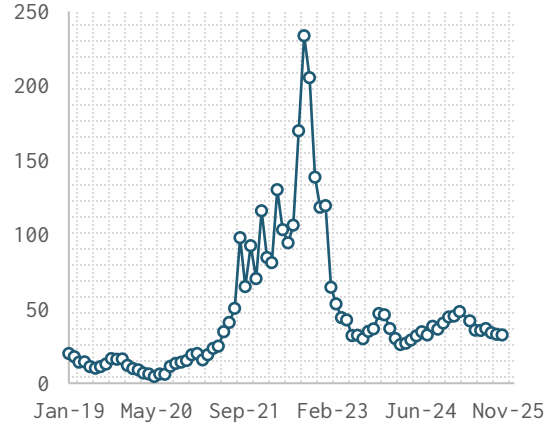


Cascading the Costs of Energy

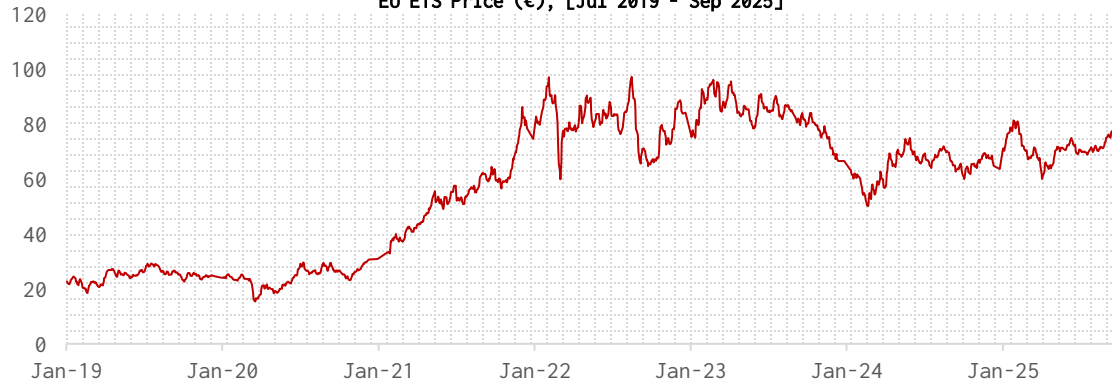
Monthly wholesale Electricity Prices (€/MWh) for EU27 and Greece, [Jan 2015 - Oct 2025]



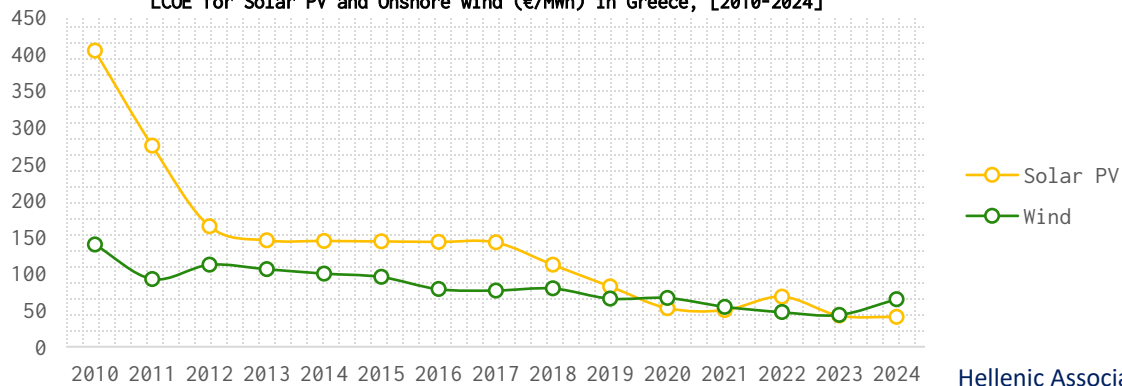
Monthly TTF Prices (€/MWh), [Jan 2022 - Oct 2025]



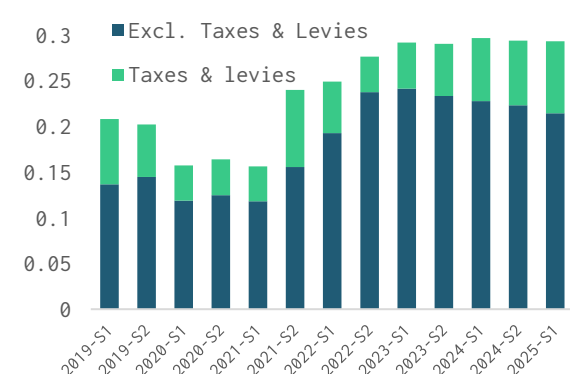
EU ETS Price (€), [Jul 2019 - Sep 2025]



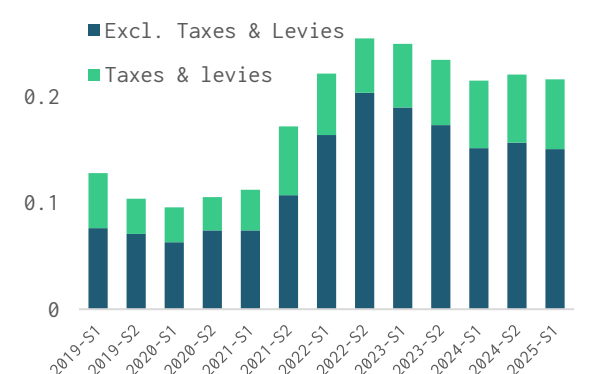
LCOE for Solar PV and Onshore wind (€/MWh) in Greece, [2010-2024]



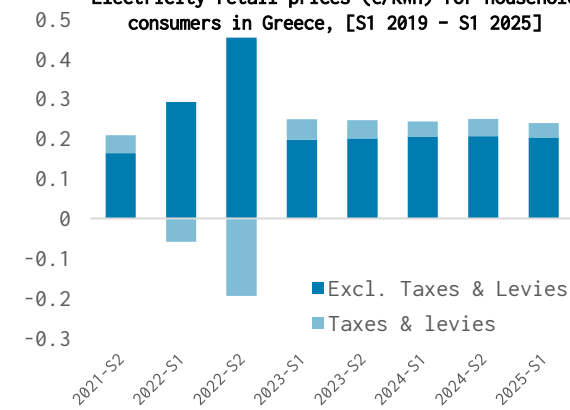
Electricity retail prices (€/kWh) for household consumers in EU27, [S1 2019 - S1 2025]



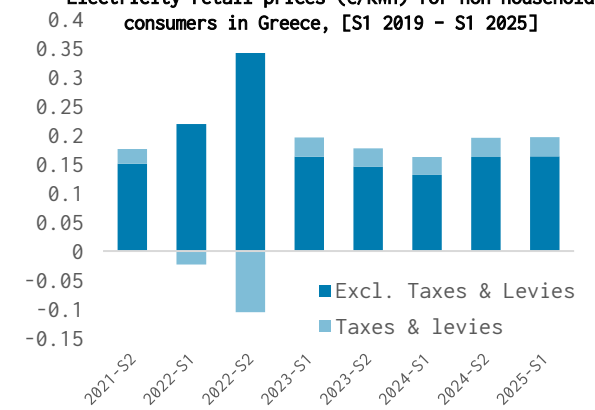
Electricity retail prices (€/kWh) for non-household consumers in EU27, [S1 2019 - S1 2025]



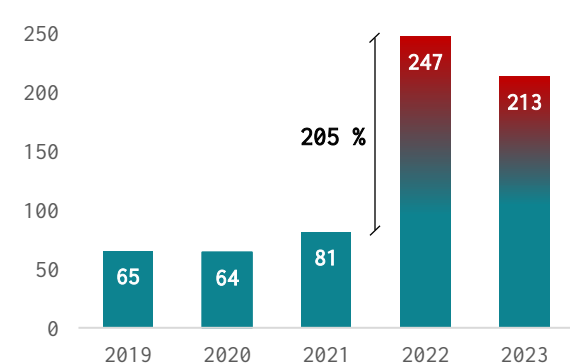
Electricity retail prices (€/kWh) for household consumers in Greece, [S1 2019 - S1 2025]



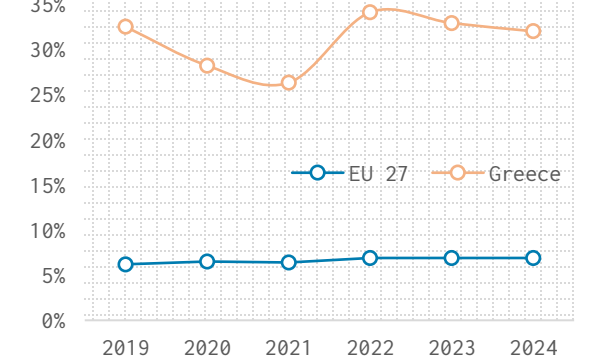
Electricity retail prices (€/kWh) for non-household consumers in Greece, [S1 2019 - S1 2025]



Subsidies supporting energy demand (billion €) in EU, [2019-2023]



Share of population with arrears on utility bills in EU27 and Greece, [2019 - 2024]



Wholesale market prices (Day-Ahead-Market prices) are directly affected from the TTF Natural Gas and EU ETS prices. Volatility in these indices leads to swings in electricity prices, clearly demonstrating the cascading cost effect between the commodities and the electricity prices.

Supply Volatility

Comparing retail prices shows how the supply-side costs ultimately hit the demand side. The differences between household and non-household electricity prices in the EU27 and Greece reflect varied regulatory responses and transmission of wholesale volatility. Policymakers must focus on shielding vulnerable consumers from this cost translation.

Retail Price Disparity



The Role of Renewables

The costs of fossil fuel-based power generation are influenced by the variable component linked to energy-related commodity prices. In contrast, renewable energy production is not subject to commodity price fluctuations, resulting in more stable and predictable costs. The decline in the LCOE clearly demonstrates a reduction in operational expenses, which in turn leads to lower electricity prices. Increased penetration of renewables in the electricity mix will help contain wholesale prices and mitigate volatility and exposure to fluctuations in commodity markets.

Affordability issues

Consumer prices in EU are higher than the pre-energy crisis period, which is reflected in slightly increasing share of consumers in arrears in utility bills. In Greece, the respective percentage is significantly higher than the EU average as it was heavily affected from the prolonged financial crisis of the previous decade.



HELLENIC ASSOCIATION
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