



December 2025

Jonathan Bruegel || Power Sector Analyst, Europe

Kevin Leung || Sustainable Finance Analyst, Debt Markets, Europe

TotalEnergies and EPH Launch Joint Venture Centred on Fossil Fuels

- *A planned joint venture between TotalEnergies and fossil fuel utility EPH will be a high-emission power generator. The joint venture should therefore provide clear and timely disclosures to allow stakeholders to assess carbon lock-in risks.*
- *TotalEnergies' acquisition of high-emitting gas power plants undermines its climate transition plan, as these units are unlikely to use green hydrogen for combustion.*
- *TotalEnergies' acquisition rationale is underpinned by financial benefits from capacity payments. In IEEFA's view, this reliance reflects a distortion in energy market fundamentals and incoherence with energy transition trends.*
- *Since EPH retains its exposure to high-emitting assets, its green financing strategy remains incoherent, even as a recent green bond issuance by one of its subsidiaries expands this strategy.*

On 17 November 2025, oil major TotalEnergies and fossil fuel power utility Energetický a průmyslový holding (EPH) announced the creation of a 50-50 joint venture (JV) comprising 14 gigawatts (GW) of operational and under-construction power assets. EPH will sell a 50% stake in nearly its entire flexible power generation portfolio, mostly comprising gas-fired plants, to TotalEnergies in exchange for 4.1% of TotalEnergies' share capital, valued at €5.3 billion. Following the deal, EPH will become one of TotalEnergies' top shareholders.

The transaction is significant for EPH's business profile. EPH's flexible power generation segment accounted for 39% of the company's earnings before interest, taxes, depreciation and amortisation (EBITDA) in 2024 and nearly all its Scope 1 emissions. The deal also has implications for TotalEnergies' business strategy as the move appears inconsistent with the company's transition commitments and plans.



The JV will be among Europe's largest gas power producers, with plants across Italy, the UK, the Netherlands and Ireland. It will have to navigate climate transition risks as Europe's commitment to renewable energy accelerates. Any continued expansion in gas-fired assets would further lock in carbon emissions in Europe's power sector.

Critical Need for Financial and Sustainability Reporting

The transaction adds complexity and opacity to EPH's corporate structure and that of its parent company, EP Group. It comes as EPH changes its reporting boundary, transferring most of its coal assets to sister company EP Energy Transition, under EP Group. EPH also acquired a majority stake in Slovak hydropower and nuclear plant operator Slovenské elektrárne earlier this year.¹ These coal, hydro and nuclear assets are not included in the transaction with TotalEnergies.

There is no clear public information on the JV's consolidation method, capital structure or reporting responsibility. The JV appears to have symmetrical rights and a shared strategy, decision-making and governance structure between EPH and TotalEnergies. If both companies use the equity accounting method for the JV, they would each only report a single line on the balance sheet and the share of net income on the income statement. This would significantly reduce transparency.

The JV will rank among Europe's more carbon-intensive power generators, with a substantial gas generation fleet. Therefore, clear and timely disclosures on financials and sustainability related to the JV assets are critical for stakeholders to assess transition progress, in line with EU and UK climate policies and disclosure expectations. Governance risk could arise if neither EPH nor TotalEnergies report these substantial emissions and related reduction plans from gas power generation and the JV does not provide standalone reporting.

Heightened Energy Transition Risk

TotalEnergies' Move Hinders Its Transition Plan and Renewable Power Goals

TotalEnergies' acquisition allows the company to secure an estimated liquefied natural gas (LNG) offtake of 2 million tonnes per annum.² TotalEnergies is a leading LNG supplier to Europe and holds interests in regasification capacity at terminals across France, the UK, Belgium and Germany. However, climate transition risk remains material as IEEFA expects Europe's LNG imports to decline by 20% between 2025 and 2030.³

In IEEFA's view, expanding TotalEnergies' portfolio to include more high-emitting power plants does not appear consistent with a credible transition plan. It appears to be undermining the company's strategy of scaling up clean power, with a target of 100GW of gross installed renewable power capacity by 2030, an increase from 26GW in 2024.⁴ The JV does not have a renewable development plan.



In 2024, EPH reported 10.3 million tonnes of carbon dioxide equivalent (CO₂e) Scope 1 emissions from its operations in Italy, the UK, the Netherlands and Ireland combined, primarily driven by gas-fired plants. Based on its 50% stake in the JV, this would increase TotalEnergies' emissions exposure by 5 million tonnes per year — equivalent to the total emissions from the company's operated combined-cycle gas units (CCGTs) reported in 2024.

EPH is among Europe's most polluting utilities. It emitted 62.4 million tonnes of CO₂ in 2023, more than any other European utility, according to a PwC study.⁵ EPH's generation fleet had a high carbon intensity of 499 grams of CO₂e per kilowatt-hour in 2024. Taking into account the coal transfer and including the nuclear and hydro assets from the Slovenské elektrárne deal, this figure would have remained high at 258 grams of CO₂e per kilowatt-hour.⁶ Given EPH's high emissions, the tie-up with TotalEnergies is likely to add reputational pressures on both companies. TotalEnergies has already faced greenwashing-related litigation.⁷

State-Backed Capacity Revenues Support Gas Plants' Profitability

S&P Global views the JV as “potentially credit positive” for EPH, citing TotalEnergies as a “strong industrial partner”.⁸ The JV is valued at 7.4x of 2026 EBITDA. TotalEnergies' acquisition rationale is underpinned by financial benefits from capacity payments. In a presentation about the deal, TotalEnergies said it values the “attractive” capacity mechanisms particularly in the UK and Italy.⁹

In IEEFA's view, relying on capacity payments reflects a distortion in energy market fundamentals and incoherence with energy transition trends. Many of EPH's gas plants that the JV will own, particularly in Italy but also elsewhere in Europe, rely on capacity markets (or long-term contracts) to guarantee income. This system subsidises dispatchable gas generation to play a backup role, effectively keeping such assets operational that might otherwise be financially unviable under a fully competitive, energy-only market. EPH itself states that its strategy involves strengthening “its position in the merit order, improving revenue predictability through capacity payments”.¹⁰

Evidence has shown that the interests and influence of incumbent power generators have shaped the design of capacity markets.¹¹ IEEFA has already warned about Italy's problematic use of capacity payments to support its gas strategy.¹² Without such a system that is designed to guarantee profitability for gas, market signals would reflect the zero fuel costs and declining fixed costs of renewables versus high-carbon generation.

The reliance on state-backed capacity payments highlights how the JV will be exposed to regulatory risks — such as any changes in mechanism design — and market risks from emerging alternative technologies, which could affect its operating performance. Concerns over high and volatile electricity prices driven by gas fuel costs, together with accelerating renewables and energy storage deployment, advanced demand-side flexibility measures and interconnected grid systems, will weaken the long-term fundamentals of gas-fired generation.

Table 1: Capacity Markets of the UK and Italy

	UK	Italy
Auction design	Centralised mechanism with descending clock auctions held four years ahead of delivery	Centralised auction mechanism with Terna as the central buyer of reliability options
Evolution	Shift from energy-only market to capacity market in 2014	Shift from capacity payment to a capacity market with reliability options in 2019
Technology choices	<p>Mainly supports conventional generation (gas, hydro, nuclear) and interconnectors</p> <p>Marginal but growing participation of battery storage and demand-side response</p>	<p>Mainly supports conventional generation (gas and hydro), with marginal but growing participation of cross-border resources and battery storage</p>

Source: G. Ragosa et al.¹³

Using Hydrogen To Run Gas Plants Is Neither Realistic nor Green

EPH says it will decarbonise its gas plants by making them hydrogen-ready, reducing full-load hours and carrying out efficiency improvements. This is still subject to high execution risk, in IEEFA's view.¹⁴ Creating the JV signals continued expansionary capital expenditure (capex) on gas power plants. This further increases the risk of carbon lock-in and the potential for stranded assets.

Hydrogen-fuelled CCGTs are often promoted as “green”. But in practice, they may run on grey hydrogen produced from natural gas or only small shares of green hydrogen, produced through the electrolysis of water with renewable energy. Large-scale green hydrogen is not yet reliably available. EPH claims to advance hydrogen readiness across its gas fleet as part of its emissions reduction plan.¹⁵ But this is more speculative than concrete: As IEEFA has warned, shifting to green hydrogen will require a huge industrial scale-up.¹⁶

None of EPH's gas-fired electricity generation revenues (€3.8 billion) or capital expenditure (€148 million) were aligned with the EU taxonomy in 2024. This underscores that investing in hydrogen readiness exhibits execution risks and does not guarantee lower lifecycle carbon emissions in line with EU climate standards. It remains uncertain whether future revenues or capex will be taxonomy-aligned.

The table below summarises EPH hydrogen plans for its recently developed and potentially new gas power plants. Even assuming these capacities are eventually fuelled by hydrogen, grey is likely to fill much of the demand, at least at first — meaning these assets may still perpetuate fossil fuel emissions. The outcome may be a fleet that emits as much or more CO₂, since EPH is unlikely to use green hydrogen as a fuel:

1. Green hydrogen is still far from being economically competitive. It costs USD5-12 per kilogram, compared with about USD2 per kilogram for grey hydrogen.¹⁷
2. Green hydrogen procurement is an issue. As EU production is still emerging, end-users rely on imports from the Middle East or Africa at non-financially viable transportation costs.

EPH's and TotalEnergies' strategies to expand hydrogen-capable gas plants appear to be less a credible transition to clean energy and more a continuation of fossil dependency presented under climate transition ambitions.

Table 2: EPH's Hydrogen Plans for Gas-Fired Power Plants

Plant/item	Country	Capacity	Notes
Tavazzano (H-class CCGT)	Italy	800MW	Hydrogen-ready ¹⁸
Kilroot (OCGT/repowered)	Northern Ireland	700MW	Designed to be hydrogen-ready
Ostiglia (CCGT)	Italy	880MW	Designed to be hydrogen-ready
JV development/pipeline	Italy, the UK, the Netherlands, Ireland, France	Up to ~3.2GW	EPH/TotalEnergies note a ~3.2GW gas plant development pipeline in their JV*

Source: Company reports and public statements, IEEFA.

Notes: *EPH says its new gas-fired power plants are built as hydrogen-ready.¹⁹

OCGT = open-cycle gas turbine. MW = megawatts

The Green Label

In November 2025, EPH's gas and electricity network subsidiary EP Infrastructure (EPIF) issued €600 million of green bonds, which will likely cover €600 million of EPIF notes maturing in July 2026.²⁰

EPH previously issued green bonds at the holding company level.²¹ It earmarked proceeds predominantly to support EPIF (and, to a much lesser extent, EPH's nuclear and hydro activities), even though EPH's credit profile is largely driven by its gas- and coal-fired power generation assets. The planned partial divestment of its gas plants and transfer of coal assets will fail to improve the coherence of EPH's green finance strategy because the company will retain operational and governance links to these assets, in IEEFA's view. The EPIF issue brings green financing across EPH to €1.885 billion, including €1 billion at the EPH holding company. This is below the €2.9 billion pool of assets EPH has identified for refinancing but is significantly higher than EPIF's annual capital expenditure.

EPH and TotalEnergies Face Energy Transition Credit Implications

From a credit perspective, EPH may compound its risk exposure if the JV incurs new debt to expand gas plants, increasing carbon lock-in. The EPH holding company could be structurally subordinated to the JV's debt claims. The holding company's debt servicing ability relies upon dividends distributed upstream from its subsidiaries and power generation assets. Transferring ownership of many of these power assets to the JV will add cash leakage risk to the EPH group. The loss in EBITDA contributions following the divestment is significant for EPH and will only partially be offset by any dividend incomes from its 4.1% stake in TotalEnergies, which are not guaranteed. Given that EPH cites the strategic value of the stake²² and the deal has a one-year lock-up period, the company appears unlikely to use this capital to reduce debt, at least in the short term.

EPH still needs to address its significant refinancing needs in the next three years as it has major term, revolving facility and senior notes due, with climate transition considerations increasingly relevant. Credit rating agencies have not released any formal rating action on EPH since the JV was announced. S&P Global, instead, highlighted several monitoring points, including the "future strategy of the JV, including its debt levels, investment plans, and dividend policy, as well as of [the rating agency's] approach to analytically consolidate it into our EPH credit view".²³

These considerations underscore the importance of detailed JV reporting to assess the intertwined operational, climate transition and financial risks. This is potentially also relevant for TotalEnergies' credit profile, despite its current balance sheet providing a buffer. Credit rating agencies increasingly recognise the risk faced by the oil and gas sector.²⁴ While the all-stock nature of the transaction does not impact TotalEnergies' cash outflows or credit metrics, the long-term fundamentals of the capex matter. Continued investments in high-emitting assets would weigh on TotalEnergies' capital requirements and financial policy.



Endnotes

- 1 EPH. [EPH completes the acquisition of Enel's stake in Slovenské elektrárne](#). 23 May 2025.
- 2 TotalEnergies. [50% acquisition of EPH flexible generation in Europe](#). 17 November 2025.
- 3 IEEFA. [European LNG Tracker](#). October 2025.
- 4 TotalEnergies. [Strengthening Our Presence in Renewable Energies](#).
- 5 PwC. [Climate Change and Electricity: European Carbon Factor Benchmarking of CO₂ emissions from Europe's largest electricity utilities](#). November 2024.
- 6 EPH. [Annual Report 2024](#). Page 309.
- 7 Financial Times. [TotalEnergies misled consumers over climate action, French court rules](#). 23 October 2025.
- 8 S&P Global Ratings. [Bulletin: EPH's JV With Total Supports Its Credit Profile But Increases Group Complexity](#). 20 November 2025.
- 9 TotalEnergies. [50% acquisition of EPH flexible generation in Europe](#). 17 November 2025.
- 10 EPH. [EPH expands Its Presence in Carbon-Free Power Generation and reports Solid First Half 2025 Performance](#). 16 September 2025.
- 11 Energy Research & Social Science. Ragosa, G.; Watson, J.; Grubb, M. [The political economy of electricity system resource adequacy and renewable energy integration: a comparative study of Britain, Italy and California](#). January 2024.
- 12 IEEFA. [Italy's excessive gas-fired power reliance slows renewables buildout](#). 29 April 2024.
- 13 Energy Research & Social Science. Ragosa, G.; Watson, J.; Grubb, M. [The political economy of electricity system resource adequacy and renewable energy integration: a comparative study of Britain, Italy and California](#). January 2024.
- 14 IEEFA. [Examining the credibility of EPH's green bonds](#). 18 August 2025.
- 15 EPH. [EPH's updated Green Finance Framework receives Medium Green Shading from S&P](#). 26 May 2025.
- 16 IEEFA. Hydrogen: [Not a solution for gas-fired turbines](#). 1 August 2024.
- 17 International Renewable Energy Agency. [Green hydrogen strategy: A guide to design](#). July 2024.
- 18 EPH. [EPH expands Its Presence in Carbon-Free Power Generation and reports Solid First Half 2025 Performance](#). 16 September 2025.
- 19 EPH. [Annual Report 2024](#). Page 463.
- 20 GlobalCapital. [Buyers still keen on CEE energy firms as EP Infrastructure goes tight](#). 21 November 2025.
- 21 IEEFA. [Examining the Credibility of EPH's Green Bonds](#). August 2025.
- 22 EPH. [TotalEnergies and EPH establish a joint venture to operate and develop flexible power generation assets in selected European countries](#). 17 November 2025.
- 23 S&P Global Ratings. [Bulletin: EPH's JV With Total Supports Its Credit Profile But Increases Group Complexity](#). 20 November 2025.
- 24 IEEFA. [European oil: Navigating credit risk towards net zero](#). 13 March 2025.



About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

About the Authors

Jonathan Bruegel

Jonathan Bruegel is a Power Sector Analyst for IEEFA's Europe team. Before joining IEEFA, Jonathan worked more than 20 years in the energy sector and became an expert on power markets worldwide, working for several power generation utilities. His fields of expertise are conventional/renewable power generation, power storage, hydropower optimization, power market ancillary services, green hydrogen and LNG.

He holds a Bachelor of Science in Applied Mathematics from Lyon University (France), a Master of Science in Economics from London Metropolitan University and a Master of Science in Econometrics from Université Paris 1 Panthéon-Sorbonne.

Kevin Leung

Kevin Leung is a Sustainable Finance Analyst, Debt Markets, Europe, at IEEFA. He has authored reports on topics relating to sustainable credits, transition finance and sustainable finance regulatory initiatives.

Before joining IEEFA, Kevin worked in Sustainable Finance at Moody's, where he led comprehensive ESG assessments for corporates and financial institutions. Prior to that role, he worked as a credit rating analyst at Moody's for six years, covering a wide range of corporate sectors.

Kevin holds a Master's Degree in Finance from HEC Paris and a Bachelor of Science Degree from the University of Warwick.

Disclaimer

This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment, financial product or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment, financial product or accounting advice. Nothing in this report is intended as investment or financial product advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, opinion, endorsement, or sponsorship of any financial product, class of financial products, security, company, or fund. IEEFA is not responsible for any investment or other decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific or general recommendation or opinion in relation to any financial products. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third parties. IEEFA believes that such third-party information is reliable, and has checked public records to verify it where possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.