



Guarantees of Origin

Monthly Report

Q2 2024



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Regulatory Demand

The Parliament approved the Electricity Market Design Reform (EMD) on April 11th, and a watered-down version of the Corporate Sustainability Due Diligence Directive (CSDDD) on April 24th.

	EMD	CSDDD
Overview	The EMD, aimed at ensuring renewable energy affordability and advancing low-carbon initiatives. Member States are to facilitate more accessible Power Purchase Agreements (PPAs) and may employ Contracts for Difference (CfDs) or equivalent mechanisms for new public support of renewable projects.	The Directive requires companies to develop and disclose their decarbonization plans , indirectly promoting the reduction of greenhouse gas (GHG) emissions. However, the amended version narrows its reach, reducing the number of impacted companies to 5500 large entities , which may delay the directive's intended effects.
Implementation	Following the interinstitutional negotiations, the EMD Reform received approval from the Parliament on 11 April 2024. EU ministers from the Council are anticipated to endorse the bill shortly, with the regulation expected to take effect before the second half of 2024 .	The directive is set to take effect in June 2024, with member states required to integrate it into national law by 2026 . It phases in application for EU companies based on size from 2027 to 2029 , starting with the largest entities. Non-EU companies are also included based on their revenue from high-impact sectors.
Impact for the GO market	Could reduce the GO offer exchanged on the markets . PPAs and CfDs could increase the share of bundled GO : From 69% in 2023 to 77% in 2028 (S&P Platts)	Could increase the GO demand as affected companies will need to source cleaner energy. However, the impact on the GO market might be limited due to the narrowed scope of the directive, reducing the number of companies affected (5.5k EU entities instead of 15k originally planned)

Regulatory Supply

The EU may adopt a roadmap by end of 2024 for recognizing GO issued by the Energy Community (EnC), aiming for gradual integration of EnC countries into the EECS GO market (i.e. Georgia, Albania, Ukraine, Montenegro, ...)

- **Convergence criteria:** Policy convergence (I); Red II compatibility (II); Governance (III); and System functionality (IV).
- **3 stages:** The integration will start with a regional trading system, transitioning to a hybrid system where producers choose between EECS and EnC GOs, and culminating in full integration into the EECS scheme.
- **Next steps:** Adoption of the roadmap (I); Fulfilment of the criteria(II); Official recognition(III); Monitoring by the Commission (IV).

Romania's New Contract for Difference (CfD) Scheme to Cancel Tradable GOs, impacting exports and investments dynamics

- **Non-tradable GOs for CfD Winners:** Romania's CfD scheme will issue but cancel immediately GOs from supported renewable sources. These GO will be assigned to the national electricity suppliers. Therefore these GOs won't be tradable.
- **Market Implications and Export Potential:** As a consequence, Romania's tradable GOs will mostly come from hydro sources despite a 50 GW renewable project pipeline.
- **Investor Interest and Auction Details:** High auction ceiling prices for wind (EUR 93/MWh) and solar (EUR 91/MWh) are expected to attract significant investor interest. The first auction supports 1 GW each of onshore wind and solar, with a second auction planned for 2025 to support additional capacity.

Supply & Demand Capacity

Wind expected to overtake hydro as the primary source of GOs by 2030 in Europe

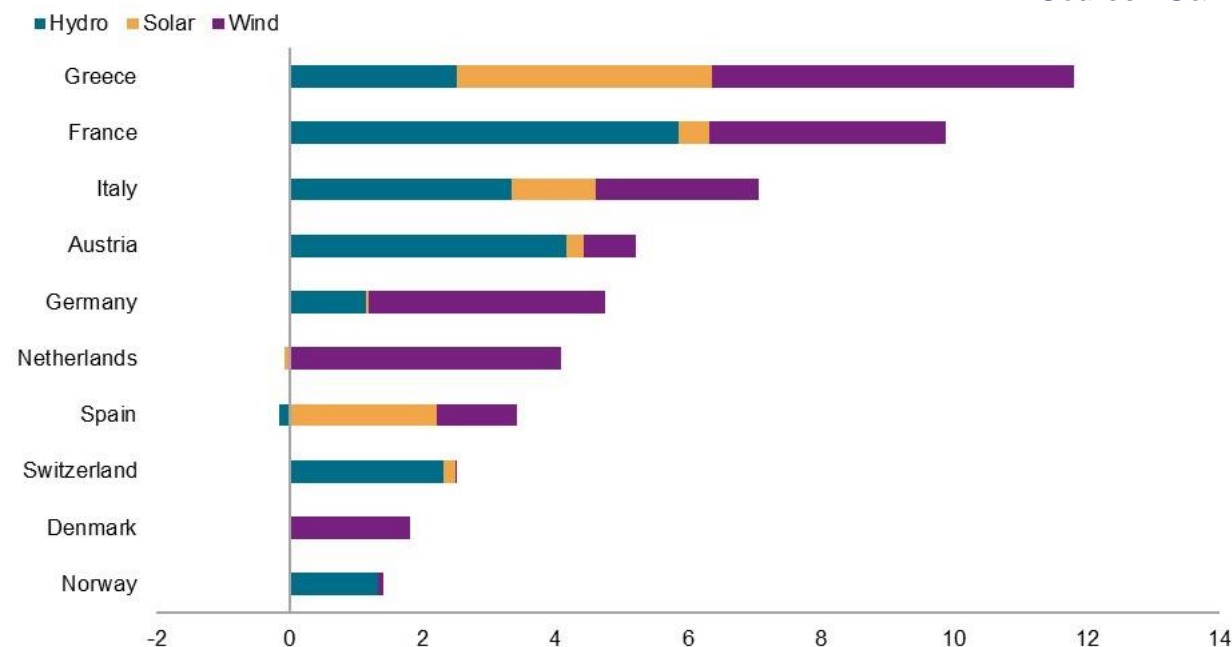
The European wind energy market is poised to surpass hydropower as the leading source of guarantees of origin (GOs) before 2030, driven by significant growth potential and ambitious deployment targets across the EU. Analysts predict a shift in the GO market composition, with wind's share increasing from 19% to 30% over five years, while hydro's share has declined from 66% to 52%, between 2019 and 2023. Germany, in particular, shows promise for wind capacity expansion, although current regulations may underrepresent its GO market potential.

State support for 109 GW of RES set to expire by 2030

According to the Council of European Energy Regulators (CEER), this total represents about a third of the 327 GW of state-supported renewables (including the UK). CEER advises against subsidizing renewables capable of market sustainability, stressing the importance of continued support to prevent the decommissioning of renewable plants due to lack of financial backing. The report highlights viable business models for unsupported renewables, such as selling output through retailers and utilizing power purchase agreements, with onshore wind and solar seen as most feasible.

2024 vs. 2023 issuance change by technology (TWh)

Source : S&P



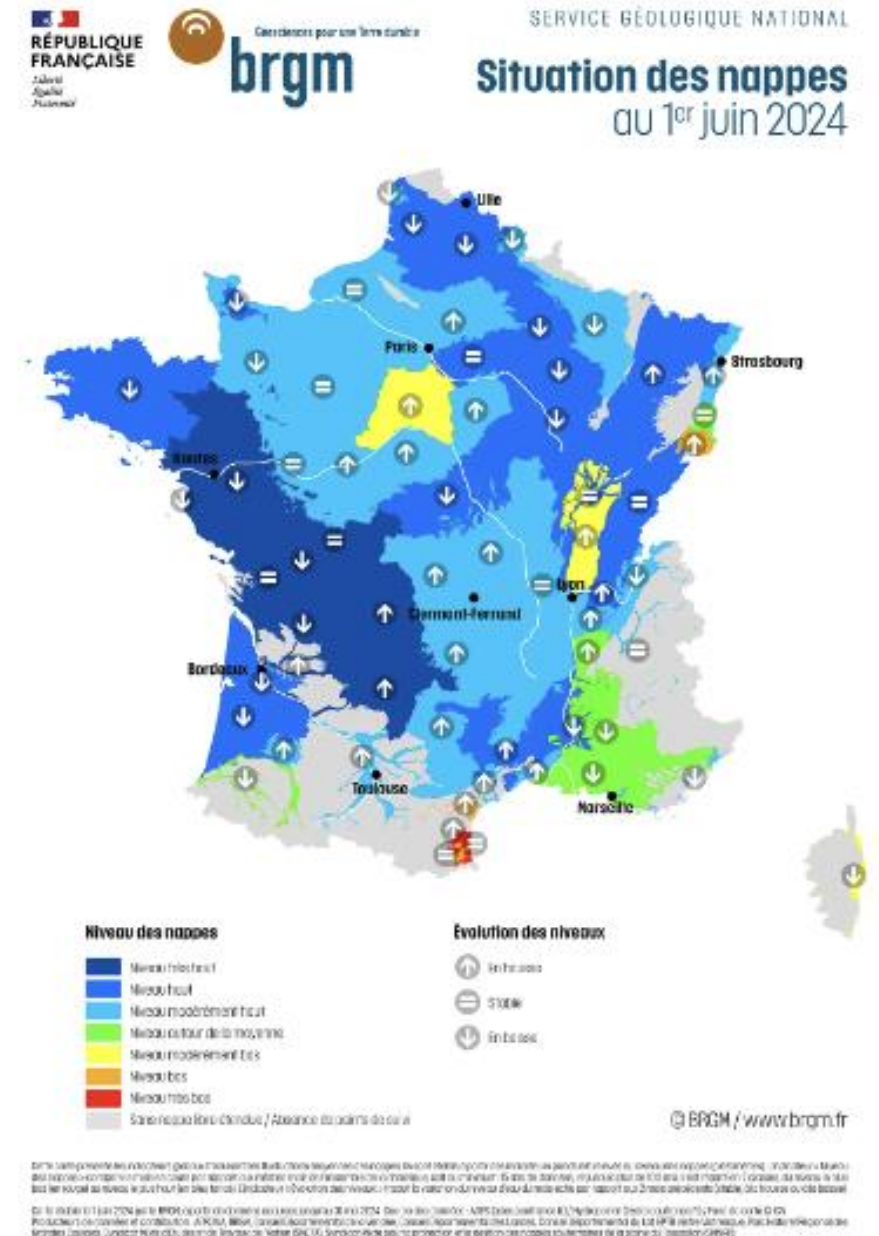
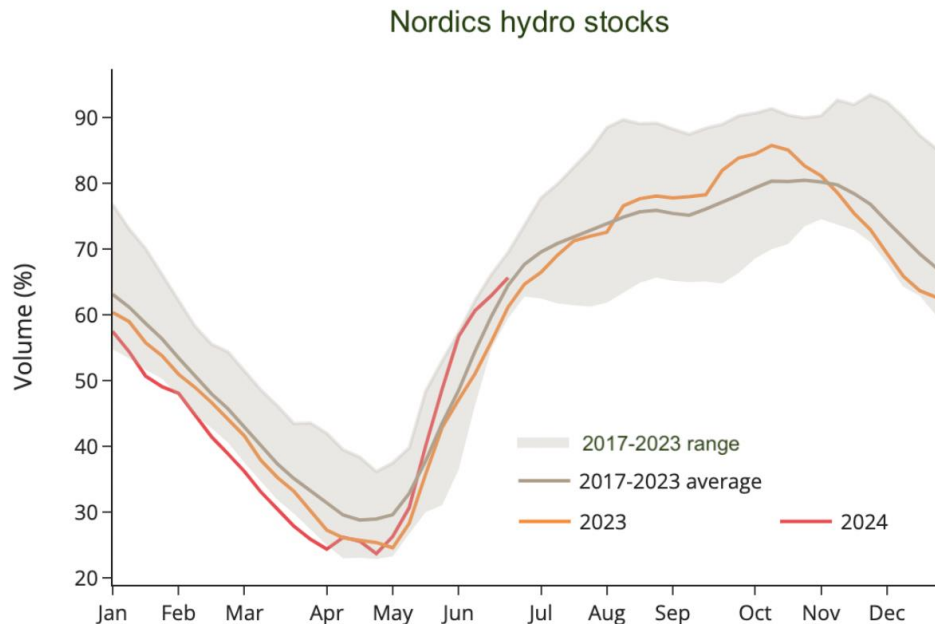
Supply & Demand Generation

European hydro was quite healthy in Q2. However a warm summer could weigh on the river's potentials.

- Underground water tables are in a relatively good state in Europe
- The snow pack in the Alps and Nordics is good
- A lasting warm period, this situation could rapidly deteriorate in July and toward August

Solar energy production soared to new records, thanks to new capacity and favorable weather conditions.

- German solar generation reached a new record high of nearly 49 GW in June, eclipsing the previous record of 47.1 GW set in May.



Market & Auctions

April 2024

EEX is in a competitive tender to continue as the French GO issuing body

EEX has been the issuing body for power French GOs since 2013, and since October 2023. and seeks reappointment after the current contract expires on 30 June. The French ministry appoints an issuing body every five years through a competitive tender, open until 4 June. The issuing body manages the national GOs registry and holds monthly auctions, with EEX having issued 110 TWh of power GOs in France in 2023.

French and Italian auctions showed better results

The prices for Italian guarantees of origin (GOs) produced in April-December 2023 saw an average increase of 27% in the april trading session compared to the previous one in March, with GOs trading between EUR 0.68-0.90/MWh, a significant rise from the previous range of EUR 0.30-0.94/MWh. The average price for French guarantees of origin (GOs) surged to EUR 1.47/MWh in the latest auction due to increased demand.

UK to offset EU GO loss by 2026

The UK is expected to compensate for the loss of EU GOs by 2026 with its own UK renewable energy guarantees of origin (Regos), thanks to the construction of offshore wind farms. The increase in domestic supply from these offshore wind farms is likely to cause a decrease in Rego prices, although price volatility is expected to persist due to factors like wind conditions and compliance cycles.

Market & Auctions

May 2024

RE100 and CDP have released their annual disclosure report.

The RE100 and CDP 2023 Report indicates a rising corporate demand for renewable electricity, with renewable electricity procurement in 2022 increasing by 3 TWh compared to the previous year. In that year, RE100 members in Europe, including the UK, reported approximately 67 TWh of electricity consumption, with 84% classified as renewable by the initiative. Key findings indicate that procurement via unbundled EACs and PPAs continues to rise, with certificates showing a significant year-over-year increase (+28%) and PPAs demonstrating more modest growth (+12%), amounting to 26.6 TWh and 11.5 TWh, respectively.

EDF is testing the Nuclear GO market

EDF released a small volume of nuclear GOs to test market demand, with only 0.15 TWh made available for February (less than 0.1% of the total supply). The strategy will adapt based on market response, with options to either continue small volume releases or pause the initiative. Demand for nuclear GOs has increased after the EU labeled nuclear energy investments as sustainable, with some buyers opting for cheaper nuclear certificates amid high renewable GO prices. However, despite low emissions, the market for nuclear GOs faces challenges due to a preference for renewable energy in Europe.

Hourly matching is valuable yet premature

The move towards aligning GOs with hourly energy production and consumption is a transformative but challenging goal. According to Aurora, hourly matching could boost the value of GOs by 33%. However, an informal poll at RECS revealed that less than 1% of market players have engaged in hourly trades. A phased approach, beginning with monthly and quarterly matching, may be necessary to handle the complexities of hourly granularity and develop market readiness.

Market & Auctions

June 2024

Greece hold its first GO auction

During Greece's inaugural auction for GOs, organized by DAPEEP, all available products were successfully sold, despite the low average price of EUR 0.4 per MWh. Prior to the official announcement scheduled for July 3, it was disclosed that the auction generated only EUR 350,000 in revenue. The event witnessed significant participation, with 13 out of 14 registered bidders purchasing GOs through a total of 500 offers, including all major Greek energy companies. Although DAPEEP had anticipated a higher price, it assessed the auction's outcome as positive.

The French Environment and Energy Management Agency creates the VertVolt label to certify green offers

VertVolt addresses the inadequacies of the current Guarantees of Origin system, which allows energy providers to claim their electricity is green without necessarily purchasing from renewable sources, a practice known as greenwashing. VertVolt aims to rectify this by requiring providers to purchase both electricity and corresponding certificates from the same, local green producer. The label also includes additional economic and societal criteria to promote local economies and new renewable projects without public financial support.

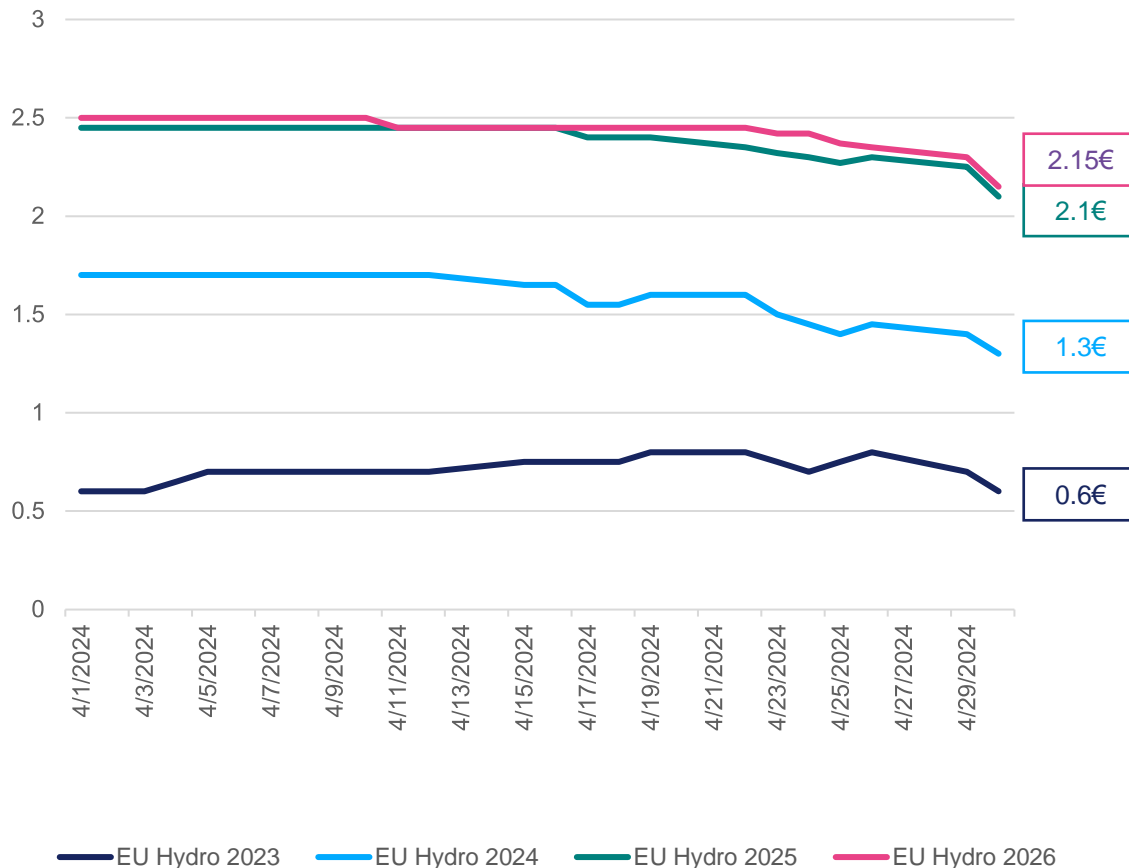
GME launched a new trading platform for long-term Gos in order to enhance the liquidity of long term

GME's monthly GOs' auctions saw a nearly 60% jump in volumes year on year, with bilateral deals registering a 3% increase. In order to enhance liquidity and stability, GME launched in May a new platform to enable longterm transactions with deferred delivery. Despite no transactions yet due to adverse market conditions and low GO prices, the platform has created some interest.

GO Prices

April 2024

EU Hydro Prices by Vintage in Euro/MWh
(source : Energyscan)



Prices on the GO market kept falling in April

The price decline has not been uniform across all vintages

- Prices for **2023 vintages** have **stabilized** around €0.60 as their validity period nears its end.
- The **2024 vintages** experienced the **largest decline**, with a 27% decrease
- Future vintage **prices fell more rapidly than last month**, dropping by 15%

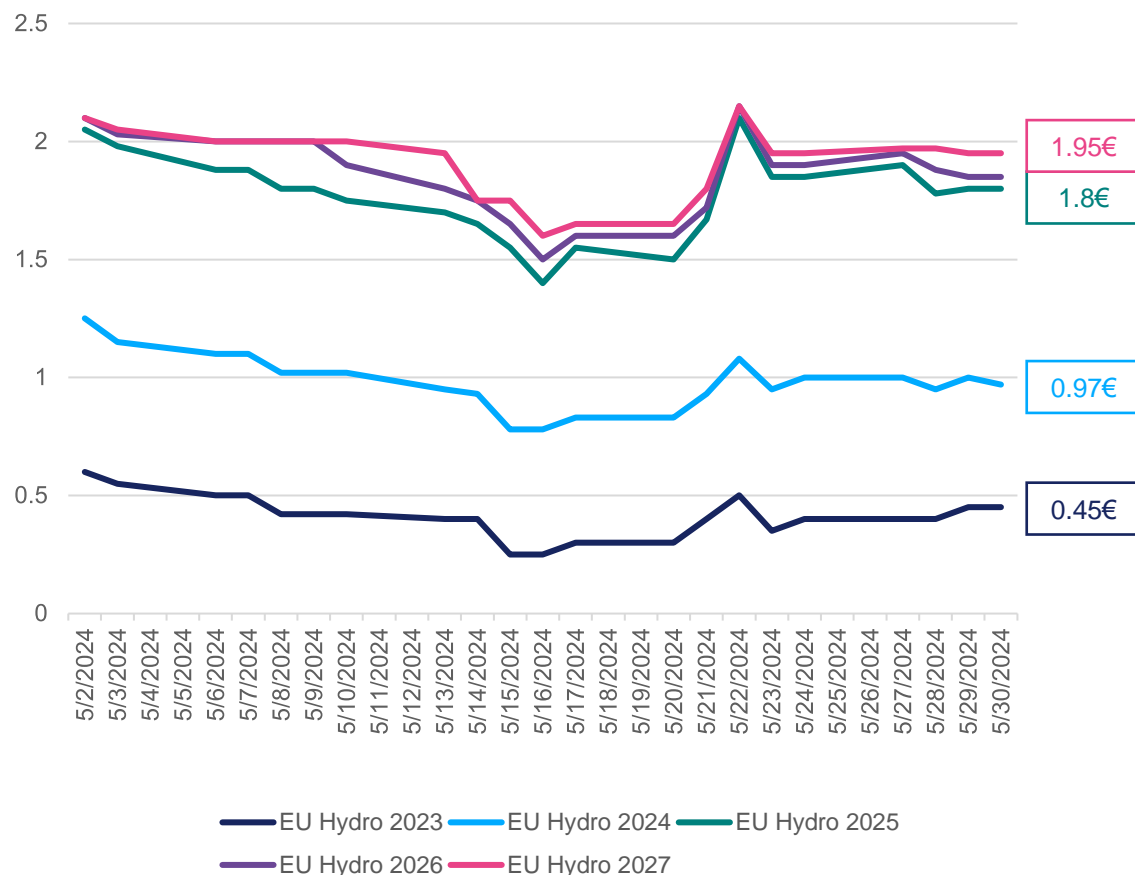
As last month, we observed the following trends

- Limited willingness to pay for technological premiums in the long run** with a marginal 5-cent premium for wind and solar over hydro for the 2026 and 2027 vintages
- No Technological premiums for 2023, 2024 and 2025 vintages.

GO Prices

May 2024

EU Hydro Prices by Vintage in Euro/MWh
(source : Energyscan)



In mid-May, prices hit an all-time low before experiencing a small rebound.

Long-term Vintage hold steady despite price drops.

- 2023 vintages lost more than half their value in two weeks before recovering
- 2024-2027 vintages** also show declines around the same time but are less severe. They lost about a third of their value over approximately two weeks.

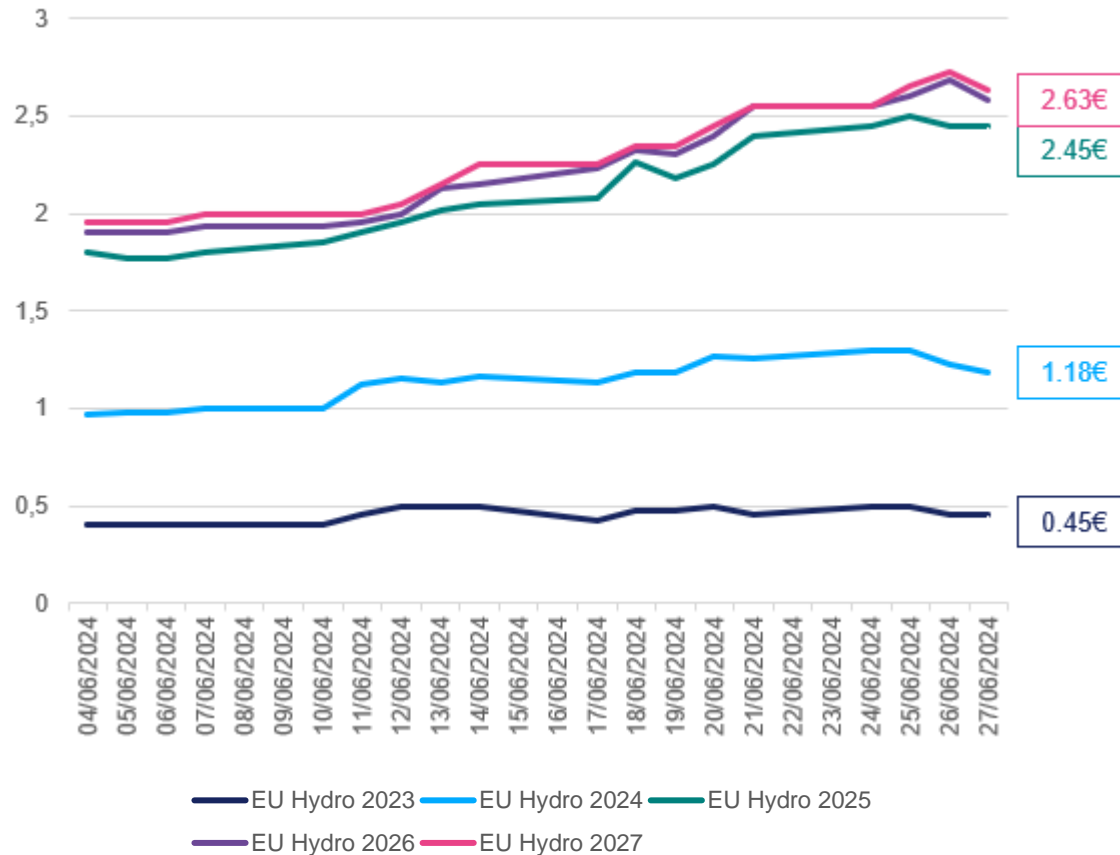
From a technological perspective, May continues last month's trends:

- Short-term markets show **no RES premium for 2023-2025 vintages** due to ongoing GO market uncertainty.
- Long-term, a slight **5-cent premium for wind and solar over hydro persists for 2026 and 2027**, though trading remains sparse.

GO Prices

June 2024

EU Hydro Prices by Vintage in Euro/MWh
(source : Energyscan)



June 2024 saw prices rebounding as demand seems to recover

Prices kept May trend.

- 2023 vintages remains the most stable and lowest priced around 45 cents
- 2024-2027 vintages kept pursuing their rebound trajectory, registering a 20 to 30% price increase over the month.

We observe a consistent 5-cent premium for vintages 2026 and beyond. No premium before that.

End of Q2 2024

Outlook for Q3

European GO Prices Rise on Increased Demand

Recent French and Italian auctions exceeded expectations, lifting prices. French GOs jumped 40% month-on-month to EUR 1.13/MWh. Prices also increased OTC. Higher demand from continental buyers and German industrial players contributed to the price rise. However, market activity might slow down with the approaching summer.

European Green Power Costs Set to Drop 15% in 2024 according to IREX

The levelised cost of electricity (LCOE) for green technologies in Europe is projected to decrease by up to 15% this year due to lower inflation and the European Central Bank's more relaxed monetary policy. This reduction in LCOE could impact the willingness and ability of various actors to invest in and pay for green technologies.

From Climate Ambitions to Climate Fatigue, will a right-leaning European Parliament initiate a climate pause?

The probability of new ambitious climate legislation in the European Parliament is unlikely following the EU elections of June, which showed progress for right-leaning parties. While the Greens, S&D, and The Left push for high climate targets for 2040, the EPP, Renew, ECR, and ID advocate for pausing climate legislation to prioritize economic competitiveness and address energy poverty.



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