

Finnish Energy comments on Rating scheme for data centres in the EU

Finnish Energy considers the Rating scheme for data centres in the EU, for the most part, comprehensive and well-designed. Finnish Energy recommends changes to the Annex III requirements regarding PPAs. The current proposal is unfeasible and risks investments and fragmentation of the current market.

Finnish Energy considers the single, uniform set of PUE and WUE thresholds across all Member States, an excellent and simple way of comparing sustainability of data centers in the EU. Using a single, uniform scale ensures that the label is based on observed energy and water performance. Introducing climate-zone corrections would shift the basis from measured data to model-based estimates, weakening the transparency the label is meant to provide.

Regarding the label itself, Finnish Energy suggests adding ERF (Energy reuse factor) to the label directly instead of the heat re-use readiness. It is important to distinguish between infrastructure readiness and actual operational reuse on the label. Heat reuse is an essential part of the data center sustainability and showing the actual operational status would also better inform procurement decisions and incentivize actual heat reuse rather than only infrastructure investment.

Finnish Energy comments on Annex III (p)

Electricity markets operate through traded balancing responsibilities, not the transfer of physical electrons. Electricity does not move through the grid as a directed flow, it moves as untraceable electromagnetic current. System operators balance frequency, which they continuously manage without regard to which generator serves which load. Power markets cannot adjust at this speed, so commercial transactions are virtual and do not map onto physical flows. Deliverability or physical traceability therefore has no meaning in an interconnected AC grid. Attempting to “increase accuracy” by adding temporal or locational matching requirements reflects a fundamental misunderstanding of book-and-claim systems. According to ISO 22095 and ISO FDIS 13659, attribution-based market instruments such as GOs, based on book-and-claim chain-of-custody model, do not rely on demonstrating physical delivery. Current GO market in Europe is built on continent-wide single-market practices with the foundation of the Single Market - where energy, labour, and goods flow freely across borders. Introducing bidding-zone-based boundaries as a corrective for “accuracy” does not strengthen comparability; it fragments it since the size, number, and configuration of bidding zones vary widely across countries and reflect policy or operational choices rather than consistent physical or market realities.

15-minute granularity

Finnish Energy recognises that the proposal to introduce 15-minute-matching in data center rating scheme aims to strengthen the additionality and matching of consumption by improving the temporal

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alignment between electricity consumption and fossil-free generation. While the ambition to enhance accuracy and transparency is sound, making 15-minute-matching a requirement would create disproportionate complexity, undermine existing market structures, and risk delaying decarbonisation efforts across the energy sector.

Introducing an 15-minute-matching obligation would dramatically increase operational complexity for all market participants - including reporting companies, suppliers, and producers. It would require the management of large volumes of granular data, significant IT system upgrades, and new verification procedures, alongside substantial skills development. This administrative and data burden would materially raise compliance costs, particularly for mid-sized and smaller companies, while offering limited incremental improvements in accuracy.

In addition, national registries and IT infrastructures across Europe are not yet equipped to handle 15-minute issuance, redemption, and verification of Guarantees of Origin (GOs). Building such capabilities would require major investments in data management and assurance processes, imposing disproportionate burdens on market participants.

From a market perspective, mandatory 15-minute-matching would fragment today's liquid and integrated European GO market into thousands of separate sub-markets — one for each hour of the year and, in some cases, each bidding zone. This fragmentation would erode liquidity, increase volatility, drive up procurement costs, and undermine the efficiency of the EU's internal energy market. Such a shift would also contradict the EU's broader simplification and competitiveness agenda, including the CSRD Omnibus initiative aimed at reducing unnecessary reporting obligations. 15-minute-matching risks discouraging voluntary renewable energy procurement and long-term Power Purchase Agreements (PPAs), which have been critical drivers of renewable deployment. Higher complexity and cost could reduce corporate appetite for PPAs, slowing down investment in new renewable capacity – contrary to EU and global decarbonisation objectives. Moreover, a fragmented market combined with narrow deliverability requirements could distort procurement strategies, restrict cross-border flexibility, and disrupt well-functioning voluntary markets that currently enable companies of all sizes to participate.

The current success of the GO system rests on its simplicity, accessibility, and liquidity - characteristics that have made voluntary renewable energy procurement an efficient and inclusive tool for climate action. Introducing a mandatory 15-minute-matching requirement would jeopardise these strengths and could cause consumers to withdraw from voluntary procurement altogether.

Demand for corporate PPAs is closely linked to bundled GOs and the environmental claims they enable. Making 15-minute and locational matching mandatory would significantly increase the cost and complexity of PPAs creating barriers for single-technology projects and smaller developers. This would likely reduce long-term contracting and slow the pace of renewable deployment. Market experience already shows limited demand for granular certificates due to their higher cost, indicating that a mandatory granular approach would further weaken the market for long-term renewable procurement. Higher procurement prices would also shorten contract durations, raise project risk, and ultimately deter investment in new renewable capacity.

For these reasons, Finnish Energy recommends that any movement toward finer temporal granularity should not be included at this time. 15-minute-matching can be a valuable long-term ambition that enhances transparency and innovation, but it should not become a baseline obligation. Before introducing any of the proposed changes, we call for a comprehensive impact assessment that covers technical feasibility, cost implications and market effects. Maintaining a flexible, market-based

approach is essential to safeguard liquidity, enable efficient investment in fossil-free generation, and ensure continued progress toward Europe's decarbonisation objectives.

Deliverability

Finnish Energy recognises the goal of introducing a deliverability requirement for data centers, particularly to address double counting. However, the concept as proposed in the delegated act revision risks undermining the functioning of the well-established European Guarantees of Origin (GO) market. Defining deliverability through narrow market boundaries such as ENTSO-E bidding zones does not reflect the physical or economic reality of electricity flows in Europe. Bidding zones are administrative tools for system operation and congestion management, not suitable for tracking electricity attributes or defining environmental market boundaries.

Europe's electricity market functions as an interconnected, implicitly coupled system where electricity and attributes flow freely across borders based on economic efficiency. The European GO market relies on this integration: the fundamental value of the GO system lies in its ability to unbundle the fossil-free attribute from the physical flow of electricity, allowing its free transferability within the EU/EEA. This unbundling enables efficient allocation of capital to the most cost-effective fossil free investments, independent of short-term grid constraints or administrative bidding-zone borders. Restricting transfers to bidding zones or national borders would reverse decades of market harmonisation and conflict with the core principles of the European single market.

Applying deliverability at the level of individual bidding zones would fragment the currently unified GO market into numerous small sub-markets. Such fragmentation would decrease liquidity, increase volatility and complexity, and raise procurement costs. It would also limit the market's ability to direct investment toward the most cost-efficient renewable generation, undermining the efficiency gains achieved through cross-border trading. It would also hinder renewable deployment in resource-rich regions, such as Northern Europe for wind and Southern Europe for solar, and reduce demand for cross-border PPAs. Maintaining unrestricted cross-border trade of GOs is therefore essential to preserve market efficiency, liquidity, and Europe's collective decarbonisation progress.

The proposal further overlooks the evolution of Europe's market design, where financial transmission rights have largely replaced physical transmission rights. Reintroducing a physical deliverability concept would be both technically unfeasible and inconsistent with EU market principles.

A more coherent and market-consistent approach would recognise Europe's integrated electricity market as the appropriate boundary for deliverability. The European GO system, operating under the AIB and EECs framework, already provides a robust structure for tracking renewable attributes and ensuring transparency while maintaining market liquidity and investment flexibility.

The proposed deliverable market boundaries do not appropriately reflect the realities of electricity deliverability in Europe. The EU/EEA operates as a highly interconnected single electricity market, governed by principles of free movement and harmonised trading rules. Guarantees of Origin (GOs), as defined in Directive (EU) 2018/2001 (RED II) and reinforced under RED III, are transferable independently of physical electricity flows and recognised across all EU/EEA Member States. Introducing narrow boundaries such as bidding zones or local grids would fragment this integrated market, erode liquidity and undermine cost efficiency.

From a technical perspective, physical deliverability cannot be demonstrated at bidding-zone level. Since market liberalisation, cross-zonal capacity booking has relied on long-term transmission rights (LTRs) for hedging, remunerated via congestion income from day-ahead trades. Physical Transmission Rights (PTRs) have been phased out in the EU's Single Day-Ahead Coupling (SDAC) and replaced by Financial Transmission Rights (FTRs), which do not confer physical nomination rights. Academic literature (Batlle López et al., 2014, Joskow & Tirole, 1998, Harvey et al., 1996) confirms the

superiority of financial rights for welfare gains. Therefore, requiring proof of physical delivery on interconnectors is not feasible in Europe's market design.

To preserve environmental integrity while maximising efficiency and fairness, the market boundary for contractual instruments should be set at the level of Europe's integrated electricity market, not fragmented bidding zones. This reflects the physical and economic reality of an interconnected system, supports portfolio synergies across borders, sustains financing models for new renewable capacity (including VPPAs), and ensures a level playing field for buyers regardless of local resource endowment.

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