CORPORATE SOURCING POLICY IN ACTION

Global Renewables Alliance

1. CONTEXT

Recent years have shown a real shift in how companies approach energy procurement. In 2024, corporates signed 62.2 GW of renewable energy Power Purchase Agreements (PPAs), long-term contracts where companies buy clean energy directly from renewable projects like solar farms or wind turbines, marking a 35% increase year-on-year (BNEF 2025). Additionally, new buyers of renewable energy have reached a record level for 2024, with 157 companies signing their first PPA in Europe (Pexapark 2025). The Asia-Pacific (APAC) region is experiencing rapid growth with activity reaching a record 9.7GW of PPAs in 2023, up 26% from the previous year. This surge is partly driven by the increasing number of companies joining initiatives like RE100 with APAC countries representing a significant portion of new members since 2020. Energy procurement is not just about ticking a box anymore; it's about finding innovative, round-the-clock solutions that truly impact corporates' carbon footprint and energy supply.

This shift takes place at a time of rapid electrification, growing power demand, and evolving context. Last year, electricity demand increased by 4.3%, compared to 2.2% increase for overall energy demand (IEA 2025). This was driven in-part by growth in industrial electrification, expansion of data centres, and AI. The demand increase coupled with the record-breaking 585GW of new renewable energy capacity added in 2024 (IRENA 2025) marks a clear message: the future of energy security is renewable, and corporates are contributing. As demand intensifies, suppliers and developers need to accelerate their pace. With electricity demand reaching significant levels of growth, driven by data centers and AI development, suppliers must stay ahead of the curve on PPAs and anticipate the move towards 24/7 Carbon-Free Energy (CFE).

The intensifying focus on energy security, driven by geopolitical uncertainties and climate imperatives, underscores the urgency of scaling renewable energy to meet ambitious 24/7 Carbon-free Energy (CFE) goals. The continuous surge in corporate renewable energy PPA signings, with a 35% year-over-year increase, sends a strategic signal to renewable power suppliers: the market is primed for innovative, agile solutions as demand-side ambition accelerates. This shift reflects a broader transition where energy security and sustainability converge as twin priorities, exacerbated by macro-economic and geopolitical events in recent years.

Moreover, the global goal to triple renewable energy capacity by 2030 – a global climate commitment set at the UAE COP28 - requires a sophisticated interplay of demand and supply-side flexibility. Demand-side strategies, such as load shifting and smart consumption, empower users to align with renewable power availability thereby enhancing grid stability. Supply-side flexibility, encompassing advanced storage, grid integration, and optimised renewable output, ensures consistent CFE delivery despite variable generation.

The era of uniform, one-size-fits-all PPAs is fading. Markets now need tailored solutions that cater to diverse players launching their long-term sustainability strategy. Suppliers must act decisively, leveraging data-driven insights and flexible offerings to capture this opportunity while navigating price volatility and regulatory shifts. Policymakers must recognise corporate renewable sourcing as a linchpin for energy security and enable frameworks, streamlining permitting, and incentivizing clean energy adoption.

In 2025, this multi-faceted PPA framework is critical to balancing energy security with decarbonization. It demands robust grid modernisation, cross-sector collaboration, and strategic investments in scalable infrastructure. By championing the objective of **24/7 Carbon-Free Energy PPAs**, stakeholders can forge a resilient, future-proof energy ecosystem that aligns economic competitiveness with environmental stewardship, positioning renewables as the bedrock of a secure global economy.

At the core of 24/7 Carbon-Free Energy (CFE) are a set of principles, which define and guide efforts towards 24/7 CFE, as defined by SEforALL:

- **Time-matched procurement**: electricity consumption is matched with carbon-free electricity generation on an hourly basis, which helps link the purchasing of renewable energy with the underlying consumption.
- **Local (or same grid) procurement**: procuring carbon-free electricity on the same grid where the consumption actually happens.
- **Enabling new generation (additionality)**: reaching deals which focus on the additional delivery of carbon-free electricity to the grid, for a quicker development of renewable energy towards 3xRenewables by 2030.
- **Maximize system impact**: focus on decarbonizing the dirtiest hours of consumption, when fossil fuels are predominant in the generation mix.

24/7 CFE Policy Recommendations- towards Belem (COP30):

The growth in renewable energy and pursuit of the 3XRenewables goal is not slowing down, and COP30 in Belem presents a critical opportunity to focus on the next steps. However, as we have seen through 2024 to present, the journey toward a sustainable future requires ongoing commitment, collaboration and investment from all stakeholders to ensure a successful transition – and 24/7 CFE procurement can champion this way forward by enabling a just and orderly transition to net-zero emissions by mid-century (Eurelectric 2024 and COP30 Presidency 2025).

More focus is needed to implement enabling policies and investment strategies across grids, storage, permitting and supply chains, and showcase tangible progress towards the tripling target by 2030. The Global Renewables Alliance (GRA) recommends that the following policies and regulations be adopted, to ensure a path towards a 24/7 CFE future for corporate sourcing. These recommendations are elaborated upon in GRA's collaborative report with BloombergNEF (2024):

1) Improve electricity data and transparency access:

Enabling public access to grid-electricity information on an hourly basis, such as supply mix and demand, will allow for more accurate tracking strategies for all market participants.

2) Enable hourly Renewable Energy Certificates (RECs):

Supporting hourly RECs according to existing hourly and sub-hourly standards will enable accurate and transparent tracking of corporate electricity consumption, as well as facilitate the trading of hourly RECs.

3) Enable a wide menu of high-impact, cost-effective CFE procurement options for corporations:

Policymakers and regulators should facilitate corporate procurement solutions that provide access to clean, renewable energy around the clock. Regulators must ensure that wheeling charges for offsite Power Purchase Agreements (PPAs) are fair, transparent, and predictable. Enabling a broad set of corporate procurement options-especially those supporting multi-year, 24/7 supply contracts with a mix of renewables and storage-can accelerate renewable energy offtake for all market participants.

4) Evolve auction designs to accelerate deployment of mature renewable and energy storage technologies:

Policymakers and regulators should move away from schemes that maintain the price of clean energy artificially high due to policies such as overly generous feed-in tariffs, uneconomic local content requirements or plant-level firming requirements. Instead, regulators should introduce different types of auctions that accelerate least-cost deployment of technologies enabling 24/7 CFE supply. Regulators can consider introducing different categories of auctions such as hybrid auctions allowing bids from a mixture of technologies subject to minimum capacity factor requirements. They can also include peak power auctions to target clean energy dispatch for specific hours of the day. Additionally, they can introduce round the-clock auctions subject to minimum availability and capacity factor requirements.

5) Reform grid planning and regulations to prioritize power system decarbonization:

Allowing a multitude of actors to participate in grid investments and smart grid planning can allow for quicker development and more efficient grid management, as well as lower wheeling charges.

6) Support direct investment by corporate buyers in deployment of emerging technologies for 24/7 CFE:

Enabling and supporting corporates to directly invest in nascent technologies can accelerate their commercialization, specifically for long duration energy storage (LDES) solutions.

2. 24/7 CFE POLICY IN ACTION

Policies facilitating the uptake/growth of 24/7 CFE are already being planned or implemented in multiple jurisdictions, the most significant one being the GHG Protocol Scope 2 emissions regulations. By mandating an hourly timestamp and a location match for electricity accounting, regulations transition from a mismatched annual system to an accurate and transparent hourly system. There is also a focus on additionality, since the location match mandates that electricity be procured from the same grid where it is consumed and accounted for. Examples of 24/7 CFE Policy in Action include:

EUROPE

Renewable Energy Directive II (RED II) Delegated Act

- Until the end of 2029, green hydrogen producers must match their production with renewable electricity on a monthly basis. Starting in 2030, this requirement becomes stricter, shifting to hourly matching. This phased approach sets a clear regulatory timeline for time-based renewable energy procurement potentially influencing broader corporate energy procurement practices.

Renewable Energy Directive III (RED III)

- Strengthens Guarantees of Origin (GOs) by requiring granular timestamps – of up to 15-min intervals. Requires Transmission System Operators (TSOs) & Distribution System Operators (DSOs) to publish granular emissions data, aligning with the 24/7 CFE trend.

RECS' proposals for RED IV

- Proposes a requirement for all corporate energy consumers to report the origin of all the energy they purchase and move to shorter disclosure periods.

The Greenhouse Gas Protocol (Scope 2 Update – TBA)

- Explicit recommendations for hourly timestamping of certificates and adding location data.

The Corporate Sustainability Reporting Directive (CSRD)

- Lowers the reporting threshold to corporates characterized by 250+ employees, €50M turnover, or €25M in assets, quadrupling the number of companies that need to report – from 11,700 to ~50,000.
- Mandates contractual instruments – including GOs – to verify renewable energy claims.

European Commission

- Considering a Clean Flexibility Instrument based on supporting 24/7 PPAs – offering support to industrial consumers committing to 100% clean electricity on an hourly basis through a 24/7 PPA and demand-side Flexibility (Pexapark 2025).
- Mandatory additionality component to the signed PPAs.

ASIAN-PACIFIC

Taiwan

Hourly T-REC system

- National granular certificate trading system based in Taiwan (operated by T-REC), operated at the commercial level on a 15-minute timestamp through 24/7 bundled RECs (EnergyTag)

Japan

24/7 data center operations

- Data centers operating on a 24/7 CFE basis in Japan to anticipate the increase in demand center activity. E.g. Kyocera Communication System opening a Zero Emission Data Center in Hokkaido using a mix of on-site solar generation and offshore wind procurement

India

Green energy open access

- This mechanism allows industrial consumers (above 100 kW) to procure RE directly from an RE generator using the transmission and distribution infrastructure under a non-discriminatory open access framework (Ember, 2025).

Renewable Purchase Obligation (RPO) framework

- Mandates a minimum share of RE consumption as a percentage of total electricity use for distribution companies (DISCOMs), captive power producers, and open-access consumers (Ember, 2025).
- Heavy industries such as steel, cement, and aluminum industries must progressively increase the share of RE in their total captive consumption, with a target of 43% by 2030.

Green Energy Open Access (GEOA) Rules, 2022

- These rules define eligibility criteria, streamline registration and permit processes, and rationalise associated charges and banking norms (Ember, 2025).

3. PROJECT EXAMPLES

These policies will enable and contribute to the real-life impact of 24/7 CFE procurement. Some projects prove that striving towards 24/7 CFE is possible – and powerful. A combination of renewable energy generation from multiple sources alongside storage and demand-side energy management can be catalysts for change. For example, Google and AES signed a first-of-a-kind deal in 2020 (Eurelectric 2020), which consists of a 500MW deal with 90% hourly matching in Virginia, USA, using a hybrid PPA of solar PV, wind, Li-Ion battery storage. A hybrid strategy is an excellent demonstration of maximizing the potential for renewable energy, by combining technologies to enhance flexibility, ultimately delivering large-scale hourly matching capabilities.

Recently, thanks to advances in corporate procurement structures and the increase in storage capacity, new deals have been appearing for multiple different actors. For example, the Masdar x EWEC project (Masdar 2024) was the first project of its kind in terms of size, covering 5GW of solar capacity with battery storage to enable EWEC to fully decarbonize its electricity consumption with 24/7 renewable energy. Other heavy industry players are taking advantage of 24/7 CFE deals composed of solar and storage as is the case with Rio Tinto and Edify Energy (Rio Tinto 2025). Using a mix of solar and Battery Energy Storage System (BESS) to power an aluminum smelter, Rio Tinto is proving that high levels of hourly matching can be achieved for heavy industry, even with constant high demand for clean electricity.

Finally, 24/7 CFE is also a solution for small electricity consumers, as is proven by Einstein Bagel Bros. (Engie 2025). Engie will provide 25 Einstein Bagel Bros. locations with round-the-clock renewable energy from a mix of their Texas wind and solar farms, to match 90% of the bagel chain's hourly electricity consumption.

4. KEY SOLUTION PROVIDERS

The ecosystem is full of solutions for all the different players – whether they are experienced, or just getting started with corporate sourcing of renewable energy. Finding the right solution for your company can be confusing, but it does not need to be that way. This final section will direct you to the correct resources for your 24/7 journey.

If you are an NGO, CSO, government, energy provider, or energy buyer,
your first step should be to sign onto the UN 24/7 CFE Compact. It regroups the 24/7 CFE principles and global partners who have pledged their efforts towards a 24/7 CFE future and gives access to the Community Platform where you can connect and share with 170+ signatories. Their 24/7 CFE Guidebook will regroup all the information you need to get started:

- UN and SEforALL's 24/7 CFE Compact

If you are an energy buyer looking to consolidate your 24/7 CFE journey,
head to the Climate Group's 24/7 CFE Coalition to discover how your company can accelerate its' decarbonization efforts:

- Climate Group's 24/7 CFE Coalition

If you are an energy supplier or an energy buyer,
granular energy accounting is essential to an effective 24/7 CFE procurement strategy. The following organization can help guide your path towards granularity, and assist you in granular REC standards, accounting, and procurement:

- EnergyTag's granular standard
- Flexidao's accounting solutions
- Granular Energy's clean energy management
- LevelTen's granular certificate trading alliance
- Renewabl's 24/7 solutions

If you are exclusively focused on Europe,
Eurelectric has resources to explain 24/7 CFE in depth specific to the European context in their 24/7 Hub:

- Eurelectric's European 24/7 Hub

If you are interested in getting involved in GRA's flagship 24/7 CFE Corporate Sourcing Campaign,

- please contact Trigya Singh (trigya@globalrenewablesalliance.org) and Felix Marchal (felix@globalrenewablesalliance.org).

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See more on Corporate Sourcing

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