



The Shift to Hourly Carbon-Free Energy Reporting

Practical insights for energy strategy and operations

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Executive summary

Clean energy reporting is moving toward more granular, time- and location-based approaches. Commonly referred to as 24/7 Carbon-Free Energy (CFE), the concept aims to bring clean electricity procurement more in line with where and when companies consume electricity, driving decarbonization of their physical electricity consumption. As of summer 2026, the Science Based Targets initiative's Corporate Net-Zero Standard Version 2.0 has formalized hourly CFE reporting expectations for large electricity consumers.¹ GHG Protocol and ISO are still determining whether and how to incorporate similar requirements and recently announced plans to consolidate their own standards into a single, harmonized framework, which is not expected to finalize until 2028.²

To understand what this shift could mean in practice, KPMG LLP piloted hourly reporting at two of its own facilities: 2 Manhattan West, the firm's US headquarters in New York, and KPMG Lakehouse, its learning and innovation center in Florida.

For the two facilities and data assessed, KPMG was able to construct hourly CFE profiles using facility sub-meter data, modeled load profiles, third-party hourly grid data, available contracted-generation data, and public CFE scoring methodology. Within this limited pilot, the analysis identified facility-specific patterns—including peak demand, baseload consumption, and hours when electricity use was less aligned with available carbon-free electricity—while also indicating that broader or assurance-ready implementation would depend on consistent interval data, defined controls, scalable systems, and market-specific procurement inputs.

"Exploring 24/7 CFE helped KPMG turn an emerging reporting concept into practical insights for our operations and clean energy strategy."

*– Darren McGann,
Chief Sustainability Officer, KPMG LLP*

¹ Science Based Targets initiative, *Corporate Net-Zero Standard Version 2.0* (Science Based Targets initiative, 2026).

² Greenhouse Gas Protocol. "GHG Protocol Announces Key Standard Development Updates: FAQ Resource." July 29, 2026.

The Evolving Landscape of Clean Energy Reporting: Beyond Annual Matching

In 2015, GHG Protocol Scope 2 guidance introduced the concept of market-based reporting for renewable energy claims.³ Under the 2015 guidance, it has become commonplace for companies to calculate their market-based Scope 2 emissions based on renewable energy that is matched to annual electricity demand, and often across wide geographic boundaries. Since then, the Science Based Targets initiative (SBTi) has finalized this shift: its Corporate Net-Zero Standard Version 2.0, published in July 2026, includes an hourly reporting requirement for large electricity consumers (Category A companies).⁴ The GHG Protocol, by contrast, is still completing a multi-year update to its Scope 2 guidance; its public consultation on hourly accounting concepts closed in January 2026, but a final standard is not expected until GHG Protocol and ISO issue an integrated public consultation in Q2 2027. In presenting the proposed revisions, GHG Protocol anchored on the rationale that hourly accounting improves accuracy and creates price signals for the times of day and locations where additional carbon-free energy and novel technologies can further grid decarbonization.⁵ ISO is earlier still, having published a draft net-zero standard for public consultation in June 2026.⁶

The SBTi Corporate Net-Zero Standard V2.0 Section 4.4 provides additional detail on the Scope 2 hourly matching criteria, specifying that “Category A” companies must report 24/7 CFE performance in regions where total annual electricity consumption is 10 GWh or more, including their third-party-assured percentage and progress during the end-of-cycle target assessment.⁷ Separately, SBTi is offering voluntary leadership recognition for companies that choose to pursue higher hourly matching: 50% until 2030, 75% until 2035, and 90% from 2035 onward.⁸

Regardless of where companies are on their GHG reporting or renewable energy sourcing journey, understanding these new reporting frameworks can inform how companies procure market instruments, set targets, and manage emissions reporting processes. Recently published feedback on the GHG Protocol’s Scope 2 consultation highlights that hourly matching remains directionally important for improving the integrity of electricity claims, while also raising broad concerns about feasibility, cost, data availability, and uneven market infrastructure.⁹ Piloting and testing hourly reporting now can be approached as a capability-building exercise: testing data access, controls, and procurement options, and understanding the operational insights gained by assessing facility electricity consumption on a more granular basis.

To understand the practical implications of shifting to 24/7 CFE reporting, KPMG conducted a pilot study at two facilities within the firm’s operational control. Two Manhattan West and KPMG Lakehouse are the firm’s two largest electricity-consuming facilities, making them the most relevant test cases within the KPMG portfolio, even though neither approaches the 10 GWh reporting threshold.



³ World Resources Institute and World Business Council for Sustainable Development, *GHG Protocol Scope 2 Guidance: An Amendment to the GHG Protocol Corporate Standard* (Greenhouse Gas Protocol, 2015).

⁴ Science Based Targets initiative, *Corporate Net-Zero Standard Version 2.0* (Science Based Targets initiative, 2026).

⁵ GHG Protocol. *Upcoming Scope 2 public consultation: Hourly matching and deliverability*. October 14, 2025.

⁶ Heather Clancy, “ISO’s New Net-Zero Standard Is Here. What to Know,” *Trellis*, June 2026.

⁷ This mandatory hourly reporting requirement applies only to “Category A” companies under CNZS V2.0, generally large companies by turnover, that also cross the 10 GWh threshold in a market. “Category B” companies, mainly SMEs and companies in lower-income countries, aren’t currently required to report hourly CFE, even if a facility exceeds 10 GWh; several other V2.0 requirements are optional for this group as well.

⁸ Science Based Targets initiative, “4. Target Implementation,” *Corporate Net-Zero Standard Version 2.0*, accessed July 31, 2026.

⁹ Greenhouse Gas Protocol. *Scope 2 Public Consultation: Summary of Feedback*. July 29, 2026.

For corporate reporting teams, 24/7 CFE could represent a meaningful shift in both data requirements and reporting controls. Instead of relying primarily on annual electricity consumption, emission factors, and certificates, companies may need to assess hourly load data, regional grid conditions, contracted carbon-free energy generation, and assurance-ready documentation. Companies evaluating how 24/7 CFE reporting could affect targets, disclosures, and reporting processes could consider the following:

Assess exposure and readiness for CFE reporting.

SBTi has set a significance threshold of 10 GWh in a market¹⁰; the GHG Protocol revision process is ongoing and has not yet determined requirements or a threshold, but companies can still consider which grid regions and markets represent their highest electricity consumption. Within those regions, evaluate what data is readily available: building submetering, utility-managed smart meters, and on-site or in-market CFE generation.

Consider data management and governance as foundational to scaling.

Moving from annual to hourly reporting materially increases data volume and complexity: instead of managing 12 months of utility invoices per facility, organizations may need to manage 8,760 hourly load observations, corresponding hourly grid CFE factors, and time-stamped hourly procurement attributes.

- Scope 2 market-based emissions: 1 facility = 12 invoices x 1 emission factor, matched with EACs

- 24/7 CFE reporting: 1 facility = 8,760 hours x 8,760 CFE factors (grid CFE + contracted CFE)¹¹

Scaling beyond a pilot will require reliable access to interval data, defined retention practices, consistent data controls, and systems capable of integrating utility, grid, and procurement datasets. This is particularly relevant as SBTi expects CFE reporting to receive third-party assurance during the end-of-cycle target assessment process.¹²

Evaluate CFE procurement practices.

The GHG Protocol Scope 2 public consultation indicated that legacy clauses and phase-ins will be considered for contracted renewable energy generation; however, SBTi and other 24/7 CFE reporting frameworks do not contemplate legacy treatment and require CFE generation to be location-matched on the same grid to qualify.^{13 14}

- **Grid and contracted CFE vary by region.** The pilot illustrated that grid CFE varies greatly by region. The ERCOT-based renewable power purchase agreement (RPPA) KPMG has contracted with would only count toward the firm's Texas-based electricity usage.
- **Granular data infrastructure is advancing globally, not just in corporate pilots.** The UK is migrating to half-hourly electricity settlement,¹⁵ Australia already settles its market every five minutes,¹⁶ India uses fifteen minute settlement intervals,¹⁷ and several EU countries are piloting hourly matched renewable energy certificates.¹⁸ A 2026 survey of 75 electricity suppliers found

¹⁰ Science Based Targets initiative, "4. Target Implementation," *Corporate Net-Zero Standard Version 2.0*, accessed July 31, 2026.

¹¹ GHG Protocol Scope 2 continues to evaluate approaches for calculating the CFE score, such as using an average fossil fuel factor for electricity consumption not matched by hourly CFE

¹² Science Based Targets initiative, "4. Target Implementation," *Corporate Net-Zero Standard Version 2.0*, accessed July 31, 2026

¹³ Greenhouse Gas Protocol, *Scope 2 Guidance Update: Public Consultation Document* (Greenhouse Gas Protocol, October 2025).

¹⁴ The Climate Group, *24/7 CFE Technical Criteria and Appendices*, version 1.03, public version (The Climate Group, 2024).

¹⁵ Ofgem, "P487 Balancing and Settlement Code (BSC) Proposed Changes," May 11, 2026.

¹⁶ Australian Energy Market Commission, "Five Minute Settlement," November 28, 2017.

¹⁷ Indian Energy Exchange Limited, *Real-time market: Market snapshot*.

¹⁸ Eurelectric, "Hourly Matching Is Gaining Traction, While More Suppliers and Buyers Are Needed to Reach Mainstream," May 23, 2025.

that hourly matching tariffs increased fourfold in one year; 52 suppliers already offered or planned to launch them within six months, across markets globally.¹⁹ For global companies, this points to the same conclusion: the data and instruments needed for hourly clean energy matching are becoming more available across the markets where companies operate.

- **Spot markets for granular certificates are emerging.** The US PJM grid region is the first ISO to offer granular certificates, or hourly EACs, for companies to procure CFE at specific hours of the day via an auction-based marketplace managed by LevelTen Energy.²⁰ This could expand to additional US grid regions in the coming years.

Consider opportunities for landlord engagement and alignment.

In multi-tenant buildings, the landlord typically controls the building's bulk-meter electricity contract and must balance the interests, lease obligations, and legacy agreements of numerous tenants. Advancing hourly CFE may therefore require coordination on EAC or product type, contract and lease terms, cost premiums and recovery, sub-metering, and access to interval utility data. Tenant sub-meter data may also exclude shared services such as central heating and cooling, elevators, lobbies, and other common areas; clearer data-sharing and allocation approaches can help reconcile a tenant's Scope 2 inventory with the landlord's Scope 3 reporting.

Understand that standards and claims guidance are still evolving.

GHG Protocol and ISO have recently announced that they will combine their corporate carbon accounting standards into a single, harmonized global accounting standard. Concurrently, the recent Scope 2 public consultation received almost 1,100 responses from 56 countries, highlighting a broad range of perspectives on how to account for renewable energy purchases.²¹ As GHG Protocol, SBTi, ISO, and voluntary market standards continue to evolve, some companies will likely consider engaging on approaches intended to improve market signal quality while remaining implementable across regions, facility types, and levels of data maturity. GHG Protocol and ISO expect to issue an integrated public consultation in Q2 2027 and a final joint standard by the end of 2028.

Monitor still-developing assurance approaches.

SBTi's CNZS V2.0 calls for third-party assurance as part of its broader emphasis on verified progress, not just target-setting. At the same time, the assurance landscape for granular, hourly carbon-free energy data is still emerging, and no widely established approach yet exists specifically for this type of reporting. The 24/7 Carbon-Free Coalition, led by Climate Group, published technical criteria in May 2025 stating that a GHG auditor's report verifying Scope 1 and market-based Scope 2 emissions, together with the additional requirements in the technical criteria, may act as a proxy for verifying CFE consumption.²² This is likely to remain an area of active development as standards are implemented.

¹⁹ Granular Energy. *Study highlights rapid growth of new category of energy tariffs offering more credible renewable energy procurement.* January 7, 2026.

²⁰ Intercontinental Exchange, Inc., "PJM GATS Type 2 Spot Granular Certificates," *ICE Futures US*, accessed July 31, 2026

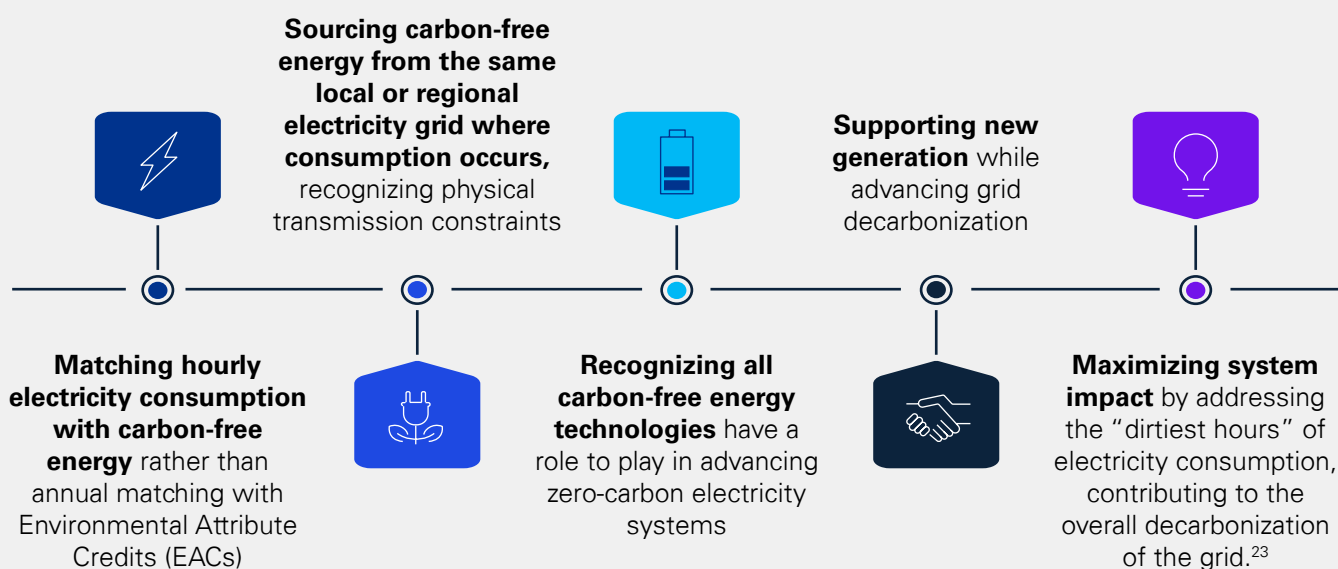
²¹ Greenhouse Gas Protocol, "GHG Protocol Announces Key Standard Development Updates," *Greenhouse Gas Protocol*, July 2026

²² Climate Group. *24/7 Carbon-Free Coalition: 24/7 Carbon-Free Electricity Technical Criteria and Appendices.* Version 1.03. Published May 29, 2025; revised July 9, 2026.

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Understanding 24/7 Carbon-Free Energy (CFE)

24/7 Carbon-Free Energy (24/7 CFE) is the practice of matching electricity consumption with carbon-free electricity on an hourly basis, in the same grid region where the electricity is consumed. " The 24/7 CFE principles include:



Compared with traditional annual Scope 2 market-based reporting, 24/7 CFE introduces a more rigorous standard by requiring closer alignment between when electricity is consumed, where it is consumed, and when carbon-free electricity is generated.

²³ United Nations, *24/7 Carbon-Free Energy: Principles for Participation* (United Nations, September 2021).

Features	Annual Scope 2 Market-Based Reporting	24/7 Carbon-Free Energy Reporting
 Core Characteristics	- Relies on annual volumes of electricity consumption matched with market-based instruments (e.g., EACs) - Under the 2015 GHG Protocol Scope 2 guidance, calculated based on renewable energy that is matched to annual electricity demand, and often across wide geographic boundaries (e.g. North America, Europe)	- Focuses on progressively matching every kilowatt-hour (kWh) of electricity consumption with carbon-free energy (CFE) on an hourly basis - Emphasizes time- and location-specific CFE generation from the same interconnected electricity system as consumption
 Data Requirements	- Aggregated annual electricity consumption data from utility bills - Aggregated annual volumes of contracted renewable instruments (e.g. RECs, PPAs)	- Hourly electricity consumption data (e.g., from smart meters) or an estimated hourly load profile - Hourly grid data on CFE generation - Hourly matched contracted CFE generation with evidence of RECs or related EACs
 Intended Benefits²⁴	Scalability & Comparability: Relatively easy to implement across diverse global operations and compare performance broadly due to standardized annual metrics. Auditability: Simpler data requirements generally make auditing processes more straightforward.	Drives Real-Time Decarbonization & Operational Insight: Encourages shifting consumption to periods of high CFE availability, directly impacting grid emissions. Provides operational insights into hourly peak energy usage. System Relevance & Technology Diversity: Hourly procurement encourages portfolios of complementary renewable resources to increase coverage across the day. It also creates differentiated market signals for short- and long-duration energy storage (e.g batteries)

²⁴ This publication is not intended to advocate for either of these reporting standards. This chart merely summarizes the distinctions of these reporting standards, including the purported benefits as stated by their proponents.

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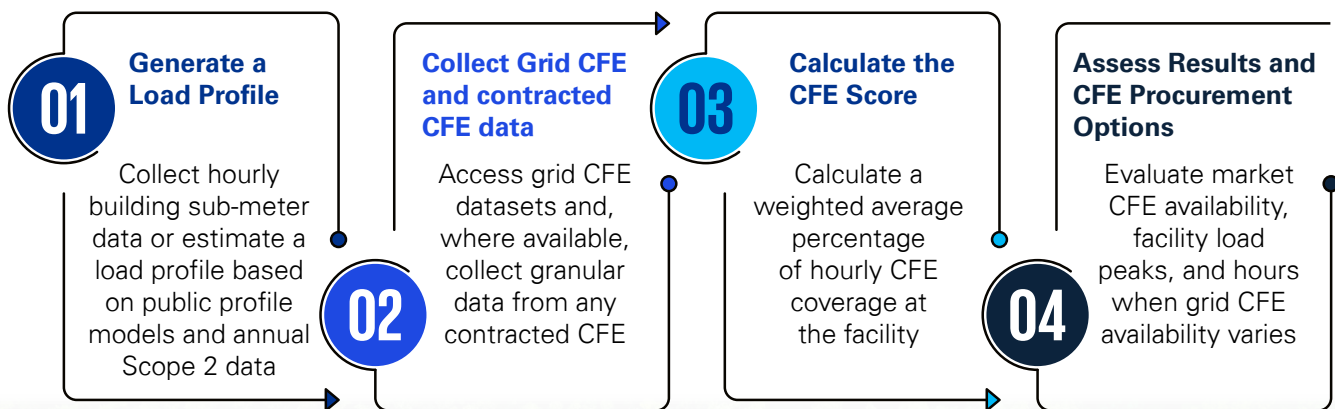
What Does 24/7 CFE Reporting Look Like in Practice?

To explore what 24/7 CFE reporting looks like in practice, KPMG piloted the approach at two of its own facilities with distinct operating and grid region profiles:

- **Two Manhattan West**, the new KPMG US headquarters and New York office, is in Manhattan's Hudson Yards area. The 450,000-square-foot LEED Gold Certified® workplace spans 12 floors in BGRE's Two Manhattan West tower (leased space, NYCW grid region) and brings together thousands of New York-based professionals in a modern, transit-connected office designed to support collaboration, client engagement, technology-enabled work, and sustainability.
- **KPMG Lakehouse** is an 800,000-square-foot, 800-room, LEED Silver Certified® state-of-the-art learning and innovation center located in Orlando, Florida (KPMG-owned, FRCC grid region). The facility operates year-round and supports employee training, internal meetings, and external programming with clients.

Together, the two locations provided a practical test case for translating annual electricity reporting into an hourly view of carbon-free electricity use, highlighting the insights this approach can generate and the data, procurement, and interpretive challenges that organizations may encounter when moving from concept to implementation.

Approach



Step 1 **Generating an hourly load profile.**

The preferred method for constructing an hourly load profile is using hourly sub-meter data, which provides near-real-time, interval electricity consumption information for a facility. Both Two Manhattan West and Lakehouse have sub-metering in place.

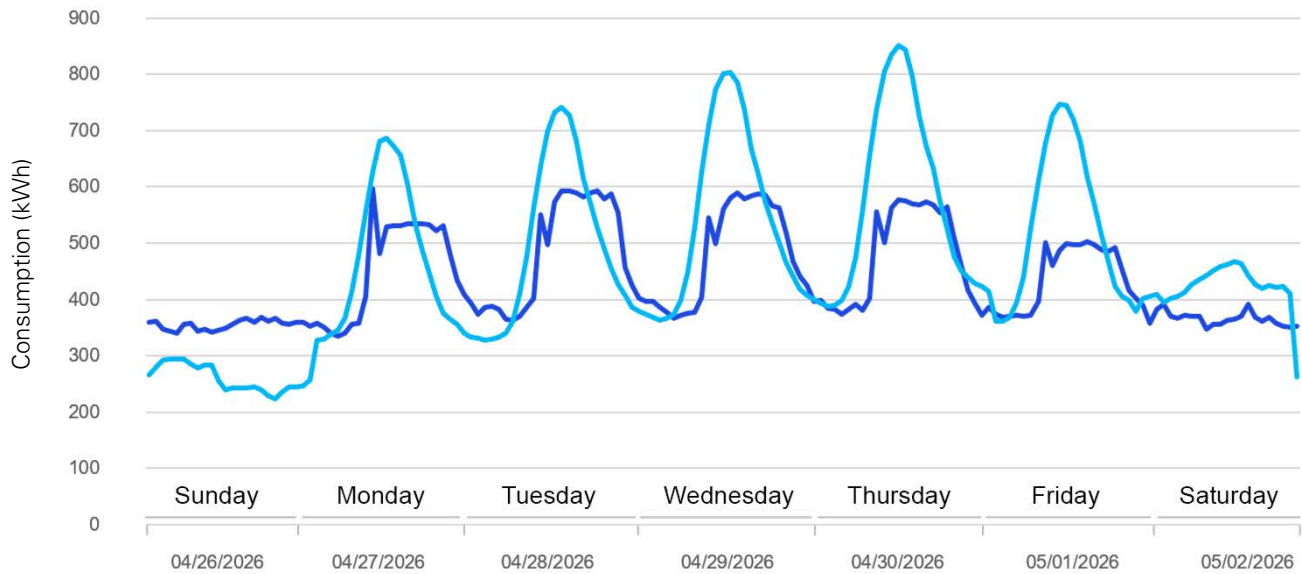
If this activity data is unavailable, the proposed GHG Protocol Scope 2 data hierarchy recommends leveraging a building load profile. For comparison purposes, an estimated load profile was created for each facility using the US Department of Energy and NREL (National Renewable Energy Lab) End-Use Load Profiles for the US Building Stock, which provide modeled 15-minute electricity loads for major building types and US climate regions.²⁵

	Two Manhattan West	KPMG Lakehouse
Actual Usage Data Source	- Hourly sub-meter data provided by landlord BGRE and managed by energy software provider ClearTrace - Set up a secure-file transfer site to receive the hourly consumption data in monthly files to the KPMG data lake	Exported hourly sub-meter data from the Orlando Utility Commission
Estimated Usage Load Profile	NREL 2018 “New York ISO Large Office” load profile - Aggregated monthly electricity usage from the sub-metering data	NREL 2018 “Florida Large Hotel” load profile - Aggregated monthly electricity usage from utility bills

To prepare the load profile, monthly electricity consumption was allocated proportionally across the hours of that month. Each hour’s estimated consumption therefore reflects each hour’s share of the modeled monthly load pattern. For example, if Lakehouse consumed 1 million kWh in January, the January load shape would be normalized so that the sum of all hourly values approximately equaled 1 million kWh.

²⁵ Wilson et al. 2021. End-Use Load Profiles for the US Building Stock: Methodology and Results of Model Calibration, Validation, and Uncertainty Quantification. NREL/TP-5500-80889.

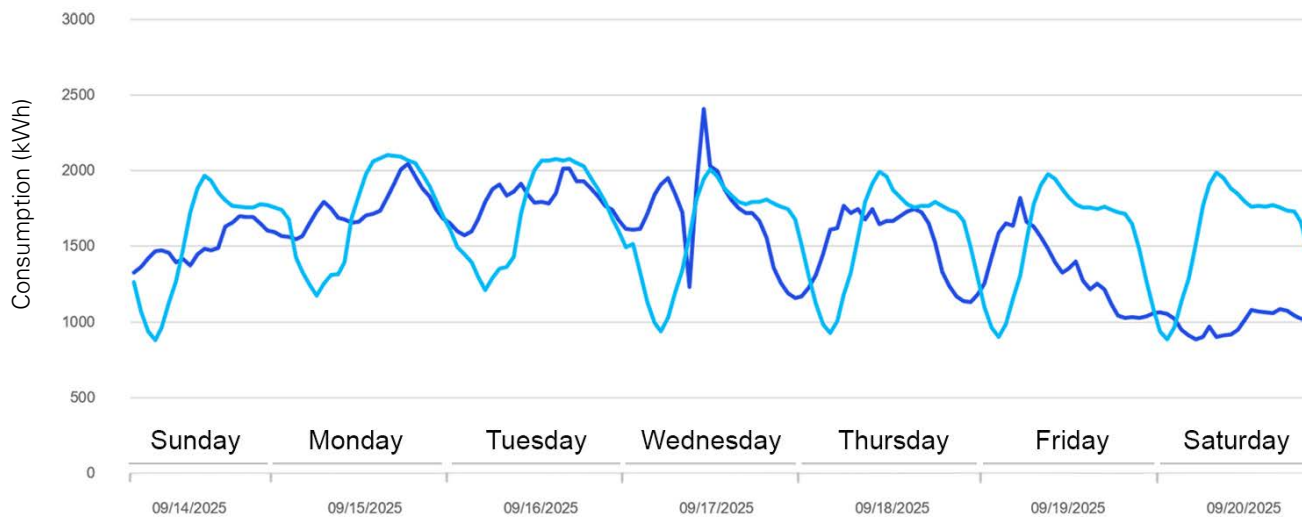
Two Manhattan West: actual versus estimated load profile



Actual Consumption (kWh)

Estimated Consumption (kWh)

Lakehouse: actual versus estimated load profile



Actual Consumption (kWh)

Estimated Consumption (kWh)

The comparison of actual and estimated hourly usage profiles at Two Manhattan West and Lakehouse suggests that estimated load profiles can provide a basis for 24/7 CFE reporting when interval meter data is unavailable, particularly for directional analysis and annualized CFE score estimation.

The estimated profiles generally capture overall consumption levels and broad operating patterns, even if statistical indicators show meaningful differences in hourly shape, peak timing, and facility-specific behavior. For example, Lakehouse typically closes on Friday afternoons and then ramps back up on Sunday evening as the next cohort of visitors begins to arrive, whereas hotel load profiles generally assume more consistent seven-day occupancy and may show peak usage on weekends.

A Princeton University ZERO Lab study found that the use of estimated load profiles has minimal impact on the outcomes of 24/7 CFE reporting. Across a range of scenarios, the researchers observed that system-level results remained consistent when approximate demand profiles were used. The study concluded that 24/7 CFE outcomes are far more sensitive to factors such as grid conditions, matching targets, and technology availability than to modest differences between estimated and actual load shapes, suggesting that the use of representative load profiles can provide a basis for 24/7 CFE reporting when actual interval data are unavailable.²⁶

Step 2 Collecting Grid CFE Factors and Contracted CFE Data

The biggest difference from Scope 2 market-based GHG reporting is that 24/7 CFE is based on hourly data rather than annual static emission factors (e.g., EPA eGRID or IEA). For this pilot, hourly grid carbon-free energy (CFE) data were sourced from Electricity Maps, an independent platform that aggregates and harmonizes electricity system data from grid operators and other public sources. Electricity Maps provides location-based, consumption-based estimates of the hourly electricity mix and associated carbon intensity for individual power systems, accounting for electricity imports and exports between interconnected grids.²⁷ As interest in 24/7 CFE evolves, additional data sources may become more readily available. For example, the US Energy Information Administration (EIA) makes hourly electricity grid information available via its Grid Monitor platform, from which data can be downloaded in six-month timeframes.²⁸

For contracted CFE data at Lakehouse, the pilot included data from the software monitoring the on-site rooftop solar arrays and the generation data that accompanies the monthly invoicing for the contracted RPPA. The RPPA is in ERCOT in Texas, so it would not count toward the CFE score, but it was included in the study to test data feasibility and to demonstrate the time-based nature of solar generation.

"24/7 carbon-free energy can seem complex, but pilots like this show that the data and tools to get started are already here. Leveraging software platforms to bring the hourly consumption, generation and clean energy data together in one place, can make it easier for organizations to understand where they are today and take their next steps in their 24/7 CFE journey."

*— Kaitlin Stearns,
Head of Data Science at ClearTrace*



²⁶ Ricks, W. & Jenkins, J.D. (2024), The Influence of Demand-Side Data Granularity on the Efficacy of 24/7 Carbon-Free Electricity Procurement, Zero-carbon Energy Systems Research and Optimization Laboratory, ZERO Lab, Princeton University: Princeton, NJ, November 19, 2024. DOI: 10.5281/zenodo.14183193

Step 3 Generating the CFE Score

The key metric for evaluating progress toward hourly carbon-free energy consumption is the CFE Score, which measures the percentage of hourly electricity consumption matched with carbon-free energy within a given regional grid. To calculate this score for any specific hour, the carbon-free electricity available to the facility (comprising both the company's directly contracted CFE and the CFE available from the regional grid mix) is divided by the company's total electricity load for that hour.

$$\text{CFE Score} = (\text{Contracted CFE MWh} + \text{Consumed Grid CFE MWh}) / (\text{Load MWh})$$

Contracted CFE represents the carbon-free energy that an organization has procured, such as from a PPA, TEAC, or Granular Certificate

Consumed Grid CFE represents the amount of carbon-free energy on the regional grid that is attributable to an organization's load and for which an equivalent amount of EACs have been retired by the supplier

The **Load** is the organization's hourly electricity consumption

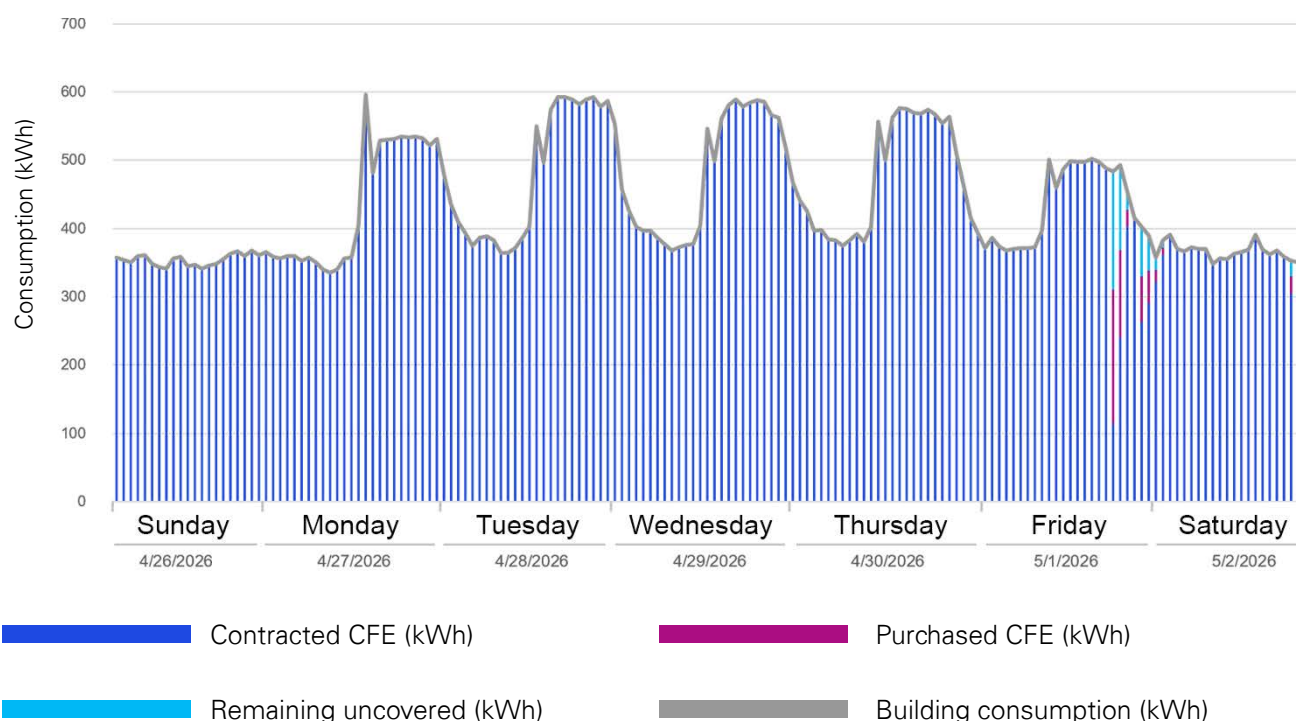
The annual CFE Score is then derived as the load-weighted average of these hourly scores across the year.²⁹

²⁷ Electricity Maps, "Methodology," *Electricity Maps*, accessed July 31, 2026.

²⁸ US Energy Information Administration, "Hourly Electric Grid Monitor: US Electricity Overview," Accessed August 5, 2026.

²⁹ Google. (n.d.). *24/7 Carbon-Free Energy: Methodologies and Metrics*.

Two Manhattan West



BGRE is the landlord at Two Manhattan West and supports 24/7 reporting for the office. BGRE leverages hydroelectric resources from the Brookfield renewable energy portfolio, with the procurement structure arranged directly with a hydro supplier in the New York market. This enables BGRE to match the building's electricity needs with carbon-free supply on an annual basis while also evaluating hourly alignment for 24/7 CFE reporting and the aim of achieving a CFE score of 100.

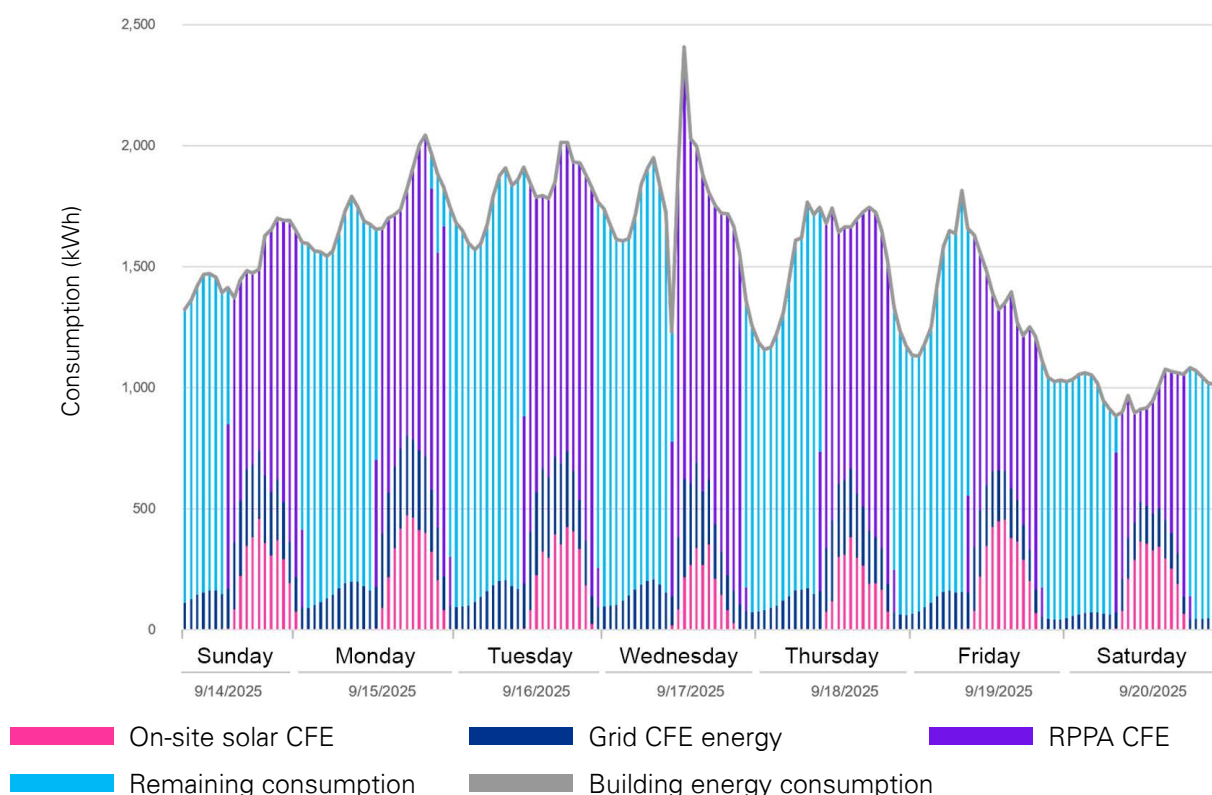
"Two Manhattan West sources its electricity directly from hydropower plants within New York State through a bundled retail power agreement, which includes the renewable energy credits (RECs). This 24/7 Carbon-Free Energy (CFE) approach benefits everyone: it helps our tenants achieve their sustainability goals and supports the property's overall net zero ambitions."

*– Tim Hewer,
VP of Energy & Sustainability, BGRE*

While the New York market may not offer large volumes of solar and wind today, there is some availability of hydro resources, highlighting a broader implementation challenge: even where annual carbon-free energy needs can be fully matched, there may still be hourly gaps when available CFE supply does not perfectly align with building load. As a result, BGRE's Two Manhattan West example illustrates both the potential and complexity of sourcing location-matched CFE, particularly as companies connect sub-metered consumption data, grid conditions, and renewable energy attributes into a consistent reporting framework.

KPMG Lakehouse

Illustrative CFE Score	Actual	Estimated
No RPPA	18%	18%
RPPA included	48%	46%



The Lakehouse pilot produced a modeled CFE Score of approximately 18% based on the carbon-free energy available within the Florida grid region: 18.1% using actual hourly usage and 17.9% using the estimated load profile. While the estimated profile does not fully capture Lakehouse's hourly operating pattern, it produces a similar illustrative CFE outcome. Including the contracted RPPA increases the CFE Score to 48% using actual usage and 46% using estimated usage.

The two contracted RPPAs went live in late 2025 and early 2026 and are based in the Texas ERCOT grid. Under 24/7 CFE principles, only CFE within the Florida grid region should count toward the CFE score; the Texas RPPA generation was modeled here to demonstrate the feasibility of incorporating

hourly RPPA data into the CFE score and show that although the RPPAs are supporting the firm's annual aims to achieve 100% renewable energy objectives and Scope 2 market-based reporting, overnight hours remain unmatched with CFE. Additionally, while hourly EACs were not retired by KPMG for the Grid CFE, for CFE reporting default grid CFE may only be counted where an equivalent amount of hourly or sub-hourly EACs has been retired on behalf of customers by the utility or supplier.³⁰ Furthermore, as the GHG Protocol continues to work through the update process, the Actions and Market Instruments (AMI) workstream is currently developing approaches for how companies could receive credit outside the GHG Scope 2 inventory for RPPAs like the one KPMG has signed in ERCOT.³¹

³⁰ Climate Group. *24/7 Carbon-Free Coalition: 24/7 Carbon-Free Electricity Technical Criteria and Appendices*. Version 1.03. Published May 29, 2025; revised July 9, 2026

³¹ Greenhouse Gas Protocol. *Actions and market instruments phase 1 progress update white paper: Purpose, principles, key concepts, and options for multi-statement reporting of impacts of actions and market instruments in corporate greenhouse gas accounting* (Version 3—Request for Information). March 2026.



Step 4 Assess Results

Conducting this pilot helped reveal how facilities use electricity over time. By translating annual or monthly consumption into an hourly load profile, organizations can identify peak-demand periods, recurring operational patterns, weekend or overnight baseloads, and hours when consumption is least aligned with available carbon-free electricity—insights that might inform energy efficiency measures, demand management opportunities, landlord or utility data requests, and future procurement strategies.

Energy Management

Lakehouse recently completed an internal energy efficiency assessment to identify electricity, fuel, and water savings opportunities. Site managers already use sub-meter data to monitor the operational efficiency of building systems such as HVAC, boilers, and water systems. Layering an hourly CFE lens onto that data could help prioritize measures—such as temperature setbacks, chilled-water optimization, lighting schedules, and occupancy-based controls—by showing when electricity use peaks, which systems may be driving those patterns, and how operational changes could improve both energy cost performance and carbon-free energy matching.

Future-Proofing Lease Language for 24/7 CFE

Most corporate leases run far longer than the 24/7 CFE reporting and instrument markets have had time

to mature. A typical KPMG office lease spans 10 to 15 years, while the SBTi CNZS V2.0 hourly matching provisions were only finalized in 2026. Tenants signing long-term leases today face a structural mismatch: the data and instruments needed to report 24/7 CFE in year eight of a lease may not exist or may look very different from what is available when the lease is signed.

The KPMG lease at Two Manhattan West offers an early example of what this collaboration can look like. BGRE, the landlord at Two Manhattan West, already provides hourly sub-metered consumption data and has structured CFE procurement to support building-wide clean energy claims, enabling the pilot to model a 100% CFE Score at that location. However, that level of data-sharing and procurement alignment was enabled by a strong working relationship, not necessarily by explicit lease requirements. As leases are renewed or amended, companies might convert these practices into durable lease language that preserves data access and procurement transparency over the life of a long-term lease.

As 24/7 CFE reporting matures, lease language may need to move beyond broad sustainability commitments and explicitly address the data, cooperation, and cost-sharing requirements

needed for hourly reporting. There may even be opportunities to specify 24/7 CFE bundled power contracts with clauses for clean power suppliers to achieve certain levels of hourly matching. Tenants may consider seeking durable rights to interval electricity data, support for evolving reporting standards, access to granular certificate markets, and third-party verification, while landlords could preserve reciprocal data-sharing rights, confidentiality protections, and mechanisms to recover reasonable costs for building-wide metering, clean energy, or demand-flexibility infrastructure.

Carbon-Free Energy Procurement

24/7 CFE procurement is unlikely to be a single enterprise-wide strategy, but a market-by-market exercise shaped by regional grid mix, electricity market rules, available clean energy supply, and the maturity of granular certificate markets. This is especially important in the US, where grid regions vary significantly: the New York NYISO region includes significant hydro resources while the Florida market is split across multiple balancing authorities with different carbon-free energy profiles.³²

For KPMG, the pilot helped distinguish between calculating a CFE Score and determining how to improve it. As with GHG reporting, the process begins with establishing a baseline: setting up data systems, understanding the calculation methodology, and identifying priority opportunities. From there, companies can evaluate procurement options by priority load center, focusing first on markets where electricity consumption is material, hourly data is accessible, and location-matched procurement can meaningfully improve both reporting outcomes and grid decarbonization impact.

Final Thoughts

When the KPMG team set out to understand 24/7 CFE, the common assumption was that this would be difficult, perhaps too difficult to be practical at scale. Much of the feedback submitted during the GHG Protocol's Scope 2 public consultation has raised real concerns about feasibility, cost, and complexity, and our team shared some of those same doubts at the start. For the two KPMG facilities assessed, the pilot indicated that certain building blocks were available, such as sub-metering, hourly grid data, and a straightforward scoring formula; availability may differ across facilities and markets. The pilot was largely a manual data analysis exercise, but it also identified potential considerations for future data processes and software platform evaluation.

GHG Protocol and ISO are still finalizing their approaches, and companies may continue to actively monitor the standards development process. In the interim, companies have an opportunity to consider and build the data, reporting, and procurement capabilities needed to act with confidence as granular carbon-free energy matching continues to emerge as an additional aspect of corporate sustainability strategy.



³² US Energy Information Administration. "Hourly Electric Grid Monitor: US Electricity Overview—Generation by Energy Source."

Authors



Blythe Chorn
Managing Director,
Climate & Sustainability
KPMG LLP
T: 303-296-2323
E: bchorn@kpmg.com



Darren McGann
Chief Sustainability
Officer
KPMG LLP
T: 612-425-8173
E: dmcgann@kpmg.com



Alistair Corse
Associate Director,
Corporate Sustainability
KPMG LLP
T: 213-955-8671
E: alistairhall@kpmg.com

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Patrick Davis, ClearTrace

Maya Elia, KPMG LLP

Tim Hewer, BGRE

Garima Raheja, Phd, Google

Matthew Sutton, Electricity Maps

Devon Swezey, Google

Rachel Swiatek, The Climate Group

Shawn Tracy, ClearTrace

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