February 9, 2026

RE: Notice of Public Hearing to Consider the Proposed California Corporate Greenhouse Gas Reporting and Climate-Related Financial Risk Disclosure Initial Regulation

EnergyTag is an independent, not-for-profit organization focused on promoting and enabling robust hourly electricity accounting standards globally. EnergyTag maintains the world's only voluntary, open-source standard detailing how hourly Energy Attribute Certificates (EACs) can be issued and used to robustly verify hourly matching claims, including claims of deliverability and incrementality.

Our standards are supported and developed alongside major stakeholders working on implementing granular electricity accounting including United Nations Energy, AES, Google, CleanCounts, PWC, and Microsoft amongst others.

EnergyTag holds positions on major greenhouse gas reporting and target-setting standards review processes including Greenhouse Gas Protocol Scope 2, Science Based Targets Initiative, and International Organization for Standardization (ISO).

EnergyTag has also advised on US federal and state level policy implementation including 45V Clean Hydrogen Tax Credit rules, Minnesota Carbon Free Standard implementation, and California Power Source Disclosure rules.

Thank you for the opportunity to provide further comment on the implementation of Senate Bill 253.

Please reach out to Alex Piper (alex@energytag.org) with any questions.

Alex Piper
Head of US Policy and Markets
EnergyTag

Summary

EnergyTag supports the Proposed Regulation as written, recognizing that it is focused on moving SB 253 forward and establishing reporting requirements for 2026. Establishing a reporting deadline of August 10, 2026 under this Proposed Regulation is important to get the program started and establish the expectation of annual reporting for compliant companies.

EnergyTag acknowledges that subsequent rulemaking will be where reporting requirements and enforcement provisions will be more thoroughly developed. It is during that process that we wish to make it clear how important it will be for SB 253 regulations to establish direct coordination with the updated Greenhouse Gas Protocol Scope 2 Guidance, expected to be finalized by the end of 2027.

As described in the Staff Report for this rulemaking, the aim of these two reporting bills is to "generate information and greater transparency around corporate GHG emissions and climate-related financial risk," and ensure that "accurate, comparable, and decision-useful climate information is made available to inform investors, lenders, insurers, consumers, and other stakeholders in the state." As we discuss further below, the proposed revisions to the GHGP's Scope 2 Guidance would dramatically improve the accuracy, comparability, and decision-usefulness of corporate Scope 2 inventories, in line with the intent of SB 253.

Part I of this comment expresses support for the legislation and the currently Proposed Regulation.

Part II of this comment expands on the criticality of and justification for ensuring subsequent rulemakings seek to align SB 253 implementation details and requirements with proposed updates to the GHGP's Scope 2 Guidance.

Part I: Support for SB 253

EnergyTag supports the goals and purpose of SB 253 – greater electricity emissions impact transparency is a foundational step towards improved policymaking, regulatory decisions, public engagement, investment decisions, and voluntary clean energy procurement and climate actions.

Requiring the largest, most well-resourced companies in the world to report on their emissions is sound policy and one being reflected in other regulatory, policy, and voluntary reporting/targeting proceedings including:

- The European Union Carbon Border Adjustment Mechanism

- The European Union Corporate Sustainability Reporting Directive (CSRD)
- SBTi Scope 2 (draft update)
- Clean Cloud Act (US Senate)
- 45V Clean Hydrogen Tax Credit, EU Clean Hydrogen Regulation, UK Clean Hydrogen Regulation

EnergyTag agrees that increased information about climate-related risks, including company-wide emissions impacts, allow investors, consumers, and other stakeholders to make better-informed decisions in ways that align with their goals. It additionally encourages companies to better understand their exposure to emissions-intensive energy sources, and incentivizes them to invest in clean energy to reduce their emissions.

This legislation further builds on California's ongoing commitment to clean energy and climate transparency and pairs effectively with other programs like the Power Source Disclosure Program hourly reporting requirements starting in 2028.

SB 253 calls specifically for companies to use the Greenhouse Gas Protocol (GHGP) Scope 2 methodology for reporting. This is a widely adopted and relied upon methodology and appropriate for the purposes of this bill—roughly 97% of disclosing S&P 500 companies use the GHGP. The GHGP has been or is being integrated in a number of policies and standards worldwide.

It must be noted, SB 253 implementation coincides with the ongoing process to update the GHGP Scope 2 Guidance, intended to improve the accuracy, integrity, and impact of Scope 2 inventories.

Part II: Ensure alignment between future reporting requirements under SB 253 and the updated GHGP Scope 2 Guidance

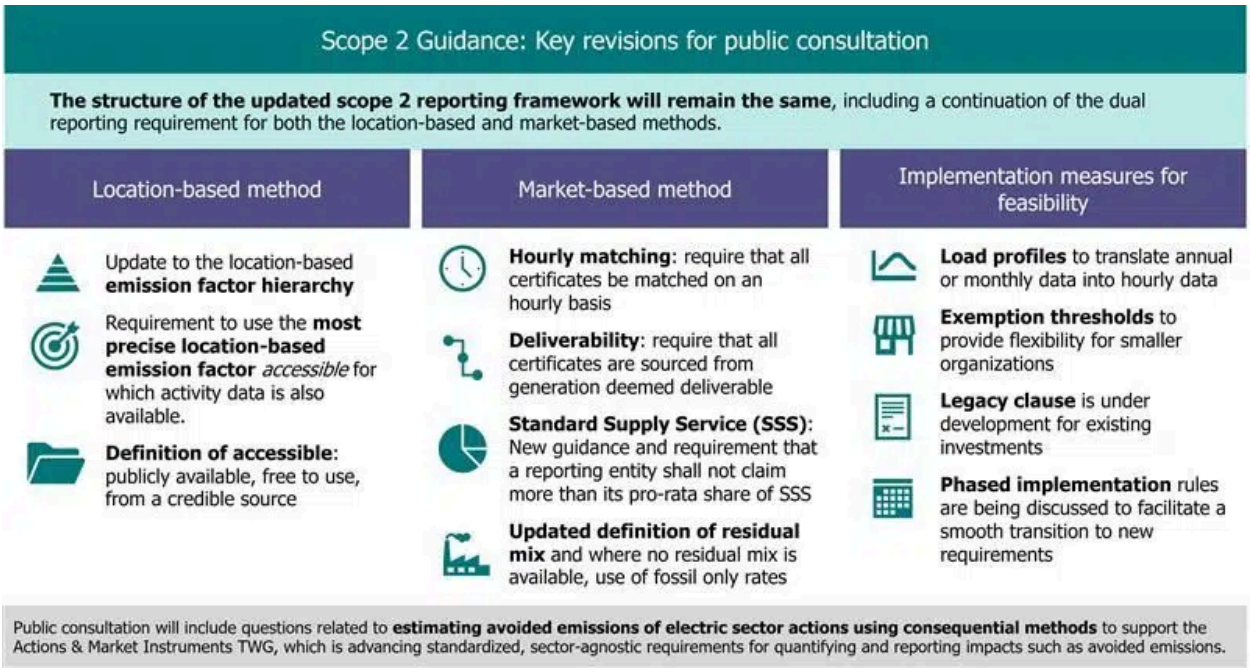
As subsequent rulemakings are considered, alignment between reporting requirements under SB 253 and the updated GHGP Scope 2 Guidance is essential. While those updates are not yet final, the draft rules indicate a clear direction of travel toward greater accuracy, transparency, and credibility, and a timeline for finalization that can be used by CARB to inform its future rulemakings.

The updated Scope 2 Guidance is expected to be final by the end of 2027. Therefore, EnergyTag recommends that, alongside efforts to align SB 253 rules with updated Scope 2 Guidance, CARB commits to a rulemaking in 2028 to adopt the finalized

GHGP Scope 2 updates and ensure continued alignment between SB 253 and the GHGP.

Background on the update process for Greenhouse Gas Protocol (GHGP) Scope 2

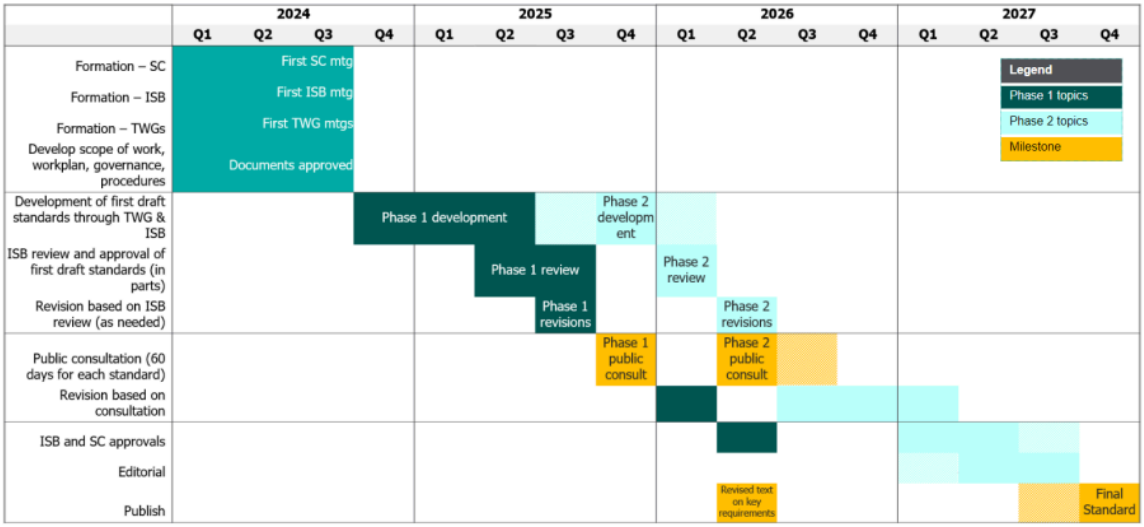
An update to the GHGP Scope 2 Guidance methodology was initiated in 2023. Proposed updates, published in draft form, would require more accurate location-based and market-based inventories. For market-based, this would include requiring hourly matching and deliverability (location-matching) to substantiate market-based Scope 2 reduction claims. As we describe further below, these proposed changes are aligned with leading academic evidence as well as regulatory precedent for effective clean electricity accounting.



Source: GHGP

The public consultation process for feedback on the proposed changes closed on January 31, 2026. Finalization of the Scope 2 Guidance is scheduled for the end of 2027. After that point, there is likely to be a phase-in before new requirements come into effect.

The expected GHGP Scope 2 Guidance update timeline is below:



Source: GHGP

Ensure SB 253 implementation follows the GHGP Scope 2 update

SB253 requires companies to use the GHGP Scope 2 Guidance to account for and report their Scope 2 emission. Today's Scope 2 Guidance allows companies to reduce their market-based Scope 2 emissions by procuring clean electricity completely disconnected in time and location from their consumption. For instance, a company in California can claim purchased solar power to reduce their emissions from nighttime electricity consumption, or claim purchased renewable energy certificates from New York to reduce their emissions in California. These rules have led to credibility challenges and have encouraged companies to seek the cheapest REC available, rather than invest in the range of technologies, including storage, geothermal, and demand flexibility, to advance true decarbonization.

The update process underway is meant to improve the integrity, impact, and feasibility of today's guidance. The following subsections outline why the proposed updates are important and how aligning SB 253 rules to these updates will improve transparency, outcomes, and trust.

Integrity and transparency

Trust and integrity are necessary to make reporting of these numbers have decision-usefulness for investors, civil society, policymakers, and even energy buyers themselves. Continuous improvement towards greater accuracy is the best way to

ensure the GHGP and policies pointing to its accounting rules remain relevant and impactful.

As leading energy transition expert, Michael Liebreich, urges in his Bloomberg article, Pragmatic Climate Reset, "Reform the Greenhouse Gas Protocol carbon-accounting rules. The current ones, written in 1990, allow companies to claim they use 100% renewable power on the basis of annual matching – which means they can offset night-time coal use with extra purchases of daytime solar power. It's absurd and destroys public confidence. The rules are currently under review and need to be tightened."

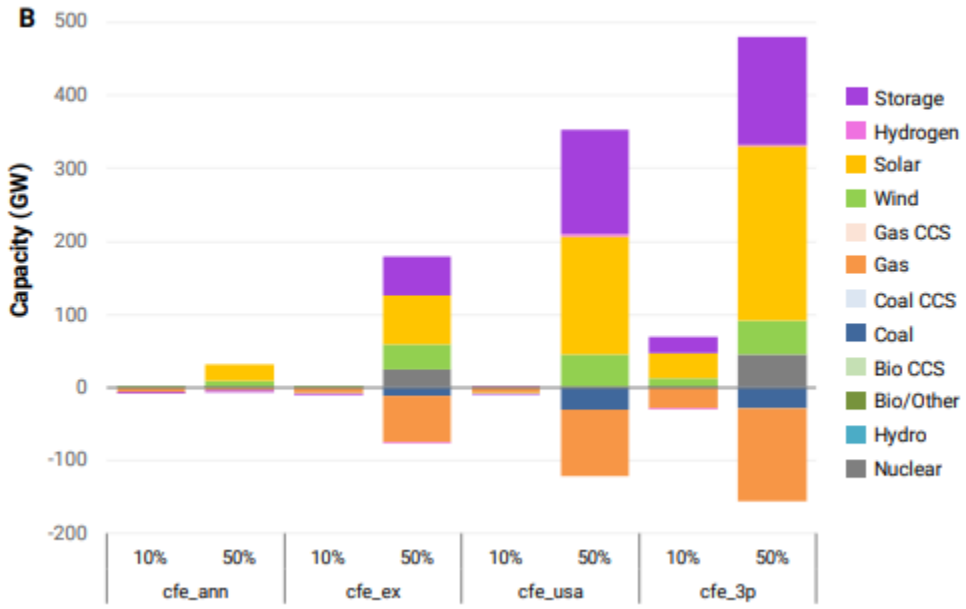
Deep decarbonization

The only way to achieve deep decarbonization everywhere at all times is to first understand where and when clean energy is lacking. Today's accounting and reporting metrics do not provide the level of granularity necessary to identify where and when clean power is most needed. The proposed changes to the GHGP, requiring hourly matching and deliverability, create visibility into these gaps. That can send investment signals to developers and clean energy buyers for technologies to fill those gaps. Hourly accounting is the only Scope 2 accounting methodology that successfully incentivizes and drives storage and clean, dispatchable technologies onto the grid in all peer-reviewed research on the topic.

EPRI was the most recent to come out with a study showing how storage is deployed based on higher levels of hourly matched clean energy procurement. This work is still in pre-print but echoes academic alignment around this point.

System Effects of Carbon-Free Electricity Procurement: Regional Technology and Emissions Impacts of Voluntary Markets

John Bistline[1]*, Geoffrey Blanford[1], Adam Diamant[1], Arin Kaye[1], Daniel Livengood[1], Qianru Zhu[1], Francisco Ralston Fonseca[1]



Configuration (Abbr.)	Description
Carbon-Free Electricity (CFE) Qualification Criteria	
Reference (ref)	On-the-books federal and state electric sector policies and incentives, including the Inflation Reduction Act (IRA), but without voluntary CFE demand; no explicit national CO_2 policy
Three Pillars (cfe_3p)	Qualified generation must be zero-emitting and satisfy temporal matching (i.e., hourly CFE generation must coincide with hourly consumption), incrementality (i.e., CFE resources must be new capacity), and deliverability (i.e., CFE generation must reside in the same region as demand)
Temporal Flexibility (cfe_ann)	Annual/volumetric matching instead of hourly matching but assuming incrementality and deliverability
Resource Flexibility (cfe_ex)	Existing resources allowed instead of excluded but assuming hourly matching and deliverability
Locational Flexibility (cfe_usa)	CFE anywhere in the U.S. qualifies instead of only in the 16 model regions in Figure S1 (we also consider sensitivities with intermediately sized regions) but assuming hourly matching and incrementality

Source: EPRI.[1]

[1] The 10% and 50% results for each case represent 10% or 50% Commercial & Industrial load participation in fully matching their load with clean electricity under the different criteria in each case.

Strengthen the clean energy market

These updates to Scope 2 accounting will also drive stronger, more future-proofed clean energy procurement strategies to the forefront. When companies consider their decarbonization on an hourly and locational basis, they are incentivized to look into clean energy contracting that provides greater around the clock generation. This means more investment into clean energy portfolios, including renewables paired with storage, clean firm generation like geothermal, innovative technologies like long duration energy storage, and strategies to deliver on demand-side flexibility. All of these actions drive money into new technologies, scale of battery storage, and more effectively integrate renewable energy supply.

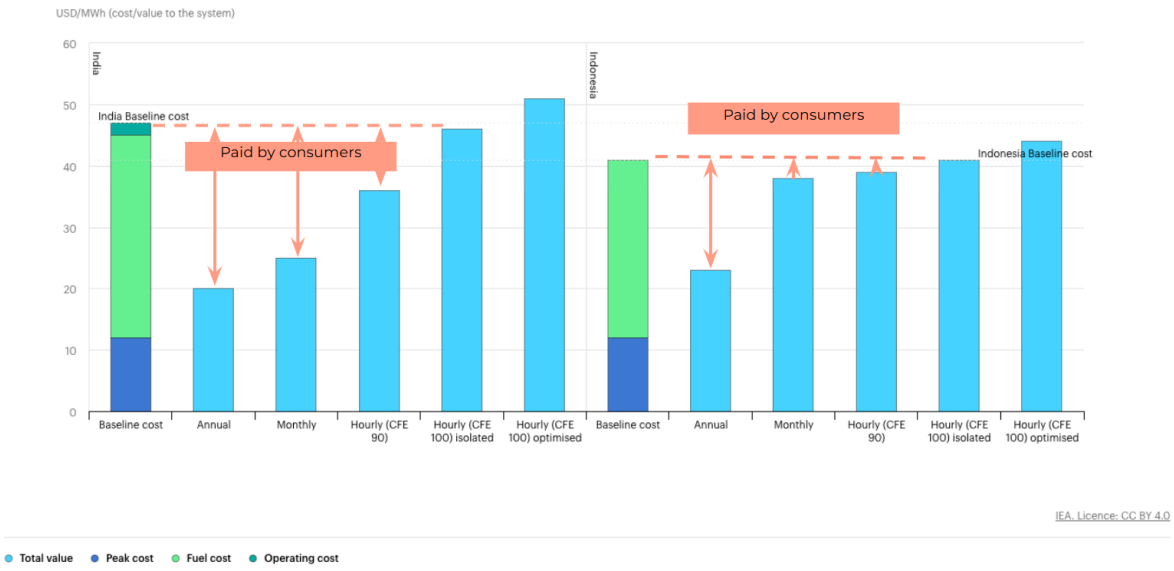
As the IEA writes in their recent report on integrating wind and solar: "Compared to yearly matching, shorter matching periods can deliver a more diverse clean energy portfolio, bringing wind, batteries and clean dispatchable capacities online in addition to cheaper solar PV."

Further, these kinds of reality-based accounting rules will reduce the broad reliance on unbundled renewable energy certificates (RECs) to make claims on Scope 2 emissions reductions. These types of certificates are widely recognized as having very little impact. If Scope 2 reporting rules continue as they are today, these certificates will continue to flood the clean energy markets and allow for large energy buyers to offset their grid energy usage with the cheapest available RECs.

Save on system costs and drive affordability

These greater rates of matching can support more efficient grid operations and ultimately save consumers money on a significant scale. The IEA and Transition Zero have each shown just how much cost reductions can be passed onto consumers based on higher rates of clean energy matching. In India, for example, Transition Zero finds that 70% around-the-clock clean power, a very reasonable level for companies procuring within-market using a mixture of resources, can save the grid system $1 billion compared to 100% annual matching.[2]

[2] Today's levels of hourly matching vary greatly. Some can be 0% matched (if all clean energy procurement is occurring out of market), and some can be at high levels already (estimated to be nearly 80% in Meta's portfolio). For more information on different hourly matching levels, Granular Energy has a primer.



Source: IEA (emphasis added by EnergyTag)

Feasibility of the GHGP Scope 2 update

Complying with the GHGP Scope 2 updates will be imminently feasible. Flexibilities and feasibility measures are proposed and necessary data is broadly available and improving in accessibility.

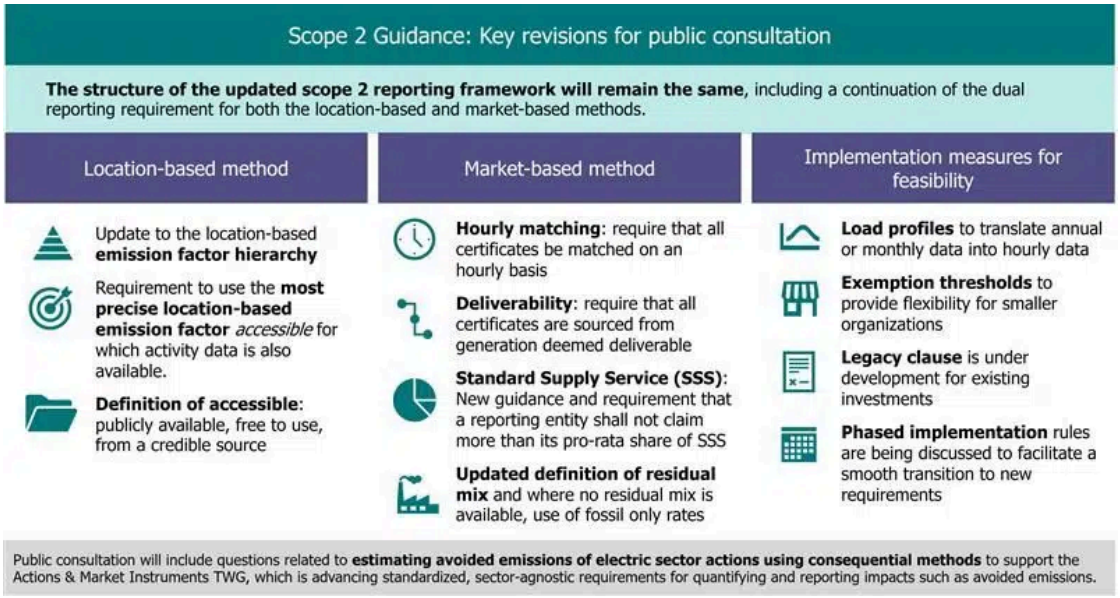
This is not actually new

Hourly tracking is already the basis of power markets. Companies complying with SB 253 are the most well-resourced companies on the market and likely already quite well-versed in power trading and procurement. It only makes sense to begin aligning clean energy accounting with power markets for all the reasons of integrity and impact described above. Put even more simply: it is not new.

GHGP updates are ensuring feasibility

The GHGP Scope 2 update is considering feasibility as a core tenet of all updates. That is why a number of feasibility measures are built into the proposal and more are likely to be included in any final rules:

- The allowance for the use of load and generation profiles to translate annual or monthly data into hourly data
- Exemption thresholds for the smallest organizations
- Legacy clause to protect the value of existing investments
- Phased implementation to facilitate a smooth transition with clarity



Source: GHGP

If SB 253 is implemented in line with updated GHGP Scope 2 Guidance, these flexibilities can also be applied to obligated companies, providing a sufficient transition timeline to enable companies to meet updated requirements.

The proposed hierarchy for supply and demand data that can be used to perform hourly accounting shows how improvement to today's accounting can be done without requiring perfectly accessible data today.

Proposed hierarchy of temporal data for contractual instruments (supply)

Temporal Granularity	Derived from	Applicable to:	Precision
Hourly	Hourly contractual instruments	Electricity consumption above exemption threshold	Higher
	Monthly or annual contractual instruments combined with hourly production meter data from the same production asset		
	Monthly or annual contractual instruments combined with hourly facility-specific production profile		
	Monthly or annual contractual instruments combined with hourly regional publicly available production profile		

Proposed hierarchy of activity data for matching contractual instruments (demand)

Data Granularity	Consumption Data Derived from	Applicable to	Precision
Hourly	Meter data Primary hourly meter data	Electricity consumption above exemption threshold	Higher
	Facility-specific load profile Total facility consumption scaled according to an estimated facility-specific load profile		
	Market-boundary publicly available load profile Total market-boundary consumption scaled according to a general or customer class-specific market-boundary load profile		
	Time-of-use average Total consumption for time-of-use billing periods (e.g., on-/off-peak hours) scaled to the proportion of electricity consumed during each time-of-use period, then averaging by the number of hours within that time-of-use period		
	Flat average Total consumption divided by the number of hours in the corresponding period for which data is available (e.g., if a reporting entity has annual consumption data, they would divide the yearly total by 8,760 hours to calculate an average hourly load)		Lower

Source: GHGP

A number of companies have already begun accounting for their Scope 2 emissions on a granular basis, in line with the proposed GHGP revisions. For example, Google calculated its hourly Scope 2 emissions for its entire global electricity footprint, and regularly releases data on its hourly matching percentage. Similarly, Meta released hourly matching data for the year 2023 for its global data center portfolio.

The value of load profiles

To be clear, most large companies already have access to hourly consumption data – avoiding the need for further feasibility measures. However, the allowance of using load profiles to better estimate usage every hour is a major flexibility as smart meters and hourly meter data continue to become more ubiquitous. The use of load profiles to estimate hourly emissions is far more accurate than today's annual accounting. Moreover, research has found that the use of load profiles does not alter the positive system-wide impacts of hourly matching.

Over time, more companies can secure this data for themselves via better sharing with utilities and investments in smart meters. But in the meantime, for those that do not already have the data access,this commonsense flexibility takes a massive step forward on the impact side without unduly burdening any reporting entity.

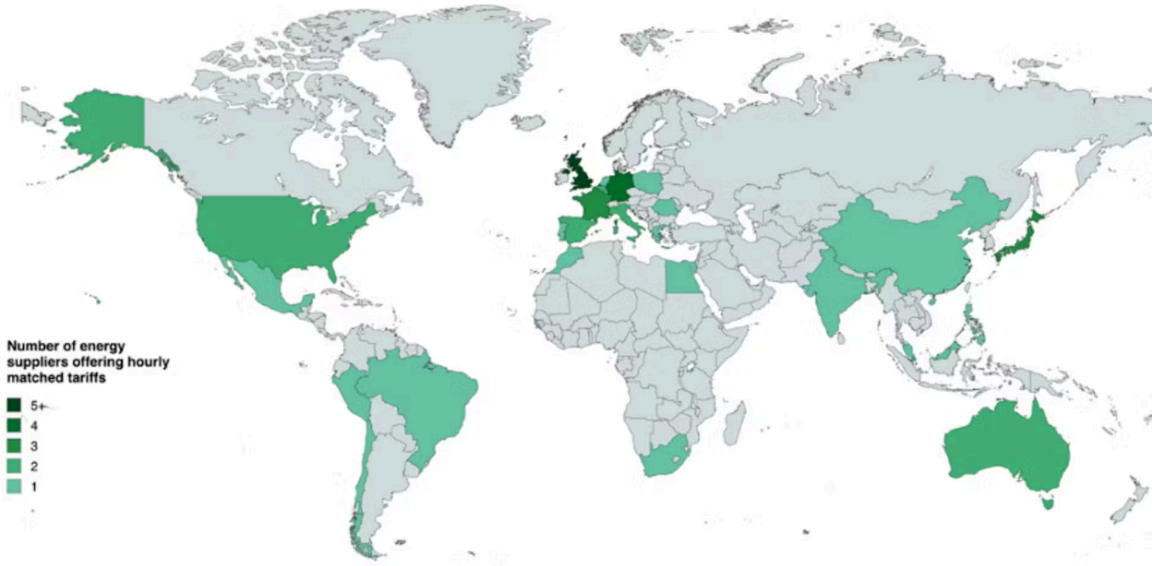
Tools and supplier solutions exist

There are already tools available to support companies in estimating their hourly Scope 2 emissions today. These calculators have been developed to help companies understand what potential GHGP changes may look like for their operations and to demonstrate feasibility of doing more accurate accounting.

Constellation and WattTime/REsurety have both developed and publicized calculators for companies to input load and supply figures and develop hourly Scope 2 emissions estimates.[3] These tools were developed relatively quickly and show that the calculation of more granular Scope 2 emissions is not as complex as some claim.

While the above tools show that Granular Scope 2 *accounting* is feasible for companies today, new solutions are also emerging for companies to engage in hourly matched clean energy *procurement*. Companies that sign power purchase agreements (PPAs) in the grids where they operate will continue to receive Scope 2 inventory credit for their purchases. Moreover, utilities across the world are increasingly offering "hourly matching tariffs," or traceable clean energy accounted on an hourly basis. Granular Energy and Baringa surveyed electricity suppliers around the world and found 52 suppliers already offer an hourly matching tariff or will introduce one in the next six months. The speed with which these offerings have come out (most within the last two years) shows how quickly the market reacts to changes in buying trends, something likely to only increase if the GHGP Scope 2 Guidance adopts the proposed updates for more accurate accounting.

[3] The existence of a calculator does not indicate EnergyTag's support for the methodologies used. In the case of WattTime/RESurety's calculator, the methodology is not transparent and results suggest different assumptions and processes used compared to Constellation's calculator. Any methodology for these types of tools should be made public and justifications should be provided.



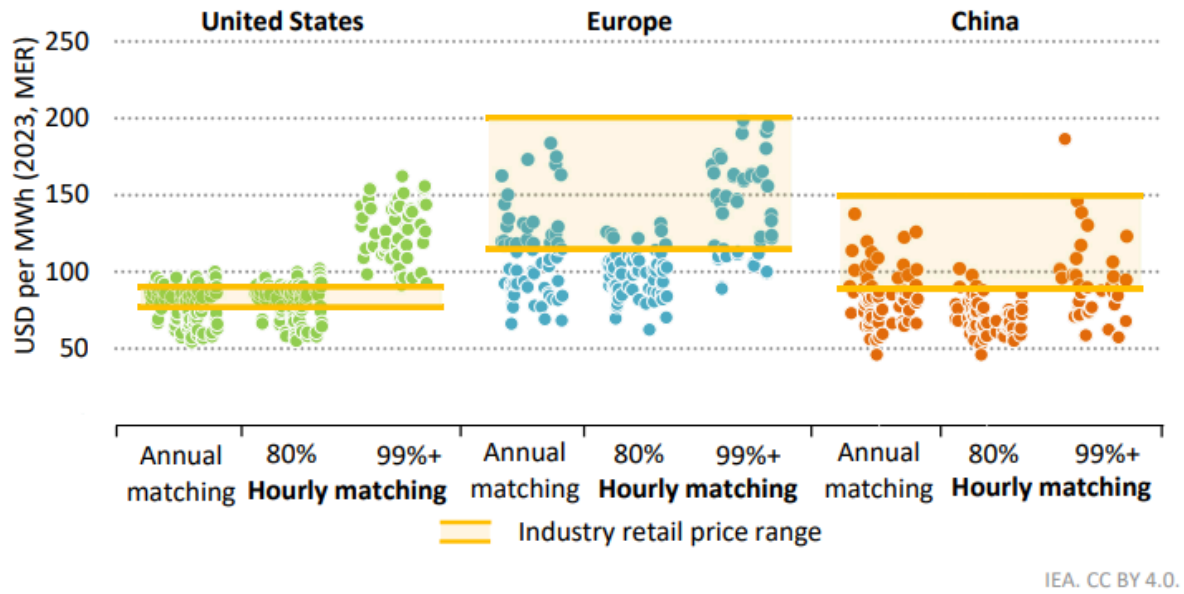
Source: Granular Energy

Companies are already committing to higher levels of matching, showing that hourly accounting is an achievable first step

A number of companies are already committing to purchasing clean energy that matches more of their actual electricity demand around the clock. The Climate Group 24/7 Initiative has six energy buyers signed on as founding partners in achieving higher and higher rates of hourly matching to eventually hit 24/7 targets: Google, Shree Cement, Iron Mountain, Vodafone, AirTrunk, and AstraZeneca.

The IEA finds that achieving high levels of hourly *matching* is already cost-competitive across major markets around the world, with 80% hourly matching is comparable to average industrial retail electricity costs in the US, Europe, and China.

Figure 2.19 ▷ Total cost of electricity per unit consumed for hybrid options of wind, solar PV and battery in the United States, Europe and China



Source: IEA

Conclusion

EnergyTag supports the core purposes of SB 253 – transparency, accountability, and decision-useful information are critical components to accurately identifying climate risk and exposure and driving investment towards needed decarbonization solutions. Accuracy is the critical component, and without following the GHGP's indicated direction towards hourly and locational accounting, this legislation risks missing the mark on intended impacts.

Additionally, if this legislation dictates accounting rules that are less accurate, phase in more slowly, or allow for more exemptions than the GHGP process, there is a significant risk of undermining and confusing global emissions reporting processes. Alignment is critical to reduce the burden on reporting companies and to develop comparable and decision-useful emissions information.

The GHGP Scope 2 development process is being guided by significant academic, technical, and public input. Aligning SB 253 compliance requirements with GHGP Scope 2 updates, on its scheduled timeline and with its feasibility measures included, is sound policy.

For more information on academic research, regulatory adoption, procurement examples, and more related to hourly accounting and matching, please use this resource developed and maintained by EnergyTag: Granular - 24/7 In Action.

We are interested in answering any further questions or providing further clarity on any of these topics.

Sincerely,

Alex Piper
Head of US Policy and Markets
EnergyTag