CEAP | CLEAN ENERGY ACCOUNTING PROJECT

Accounting for Transacted Time-Stamped Information Initiative Proposal | December 2025

1. Problem Statement

Many organizations embracing hourly carbon-free energy matching are making large procurements that may not match their own load on an hourly basis. At the same time, credible hourly tracking functionality remains limited across North America. In response, market participants have developed a range of interim approaches to enable buyers to transact time-stamped certificates and associated hourly information—approaches that vary in their ability to support credible transactions within existing registry systems. With standard-setting bodies such as the Greenhouse Gas Protocol (GHGP) and the Science Based Targets initiative (SBTi) advancing more stringent hourly expectations for reporters, and corporate demand for hourly matching continuing to grow, there is an urgent need for clear, credible best practices for trading and claiming the time-stamped (including hourly) information associated with these transactions.

This initiative will identify best practices for accounting for the transactions of time-stamped hourly information to ensure integrity, transparency, and access in voluntary and compliance markets. Outputs may include recommendations, and requirements for companies, EAC marketers, utilities, regulators, and tracking systems. This initiative aims to answer the question:

- *How can you credibly account for time-stamped hourly information before full hourly tracking functionality is available at scale?*

2. Proposal Summary

This initiative will describe credible accounting methodologies for transacting hourly information as the market exists today in North America. This includes data requirements, reporting, and claim requirements. Deliverables for this initiative may include a guidance document detailing 1) current methods for transacting hourly information in North America and 2) how to account for each of these methods using established and credible GHG accounting practices including any geographic and temporal constraints outside what is typically expected for a sub-annual/hourly EAC. Any reporting guidance covered in this initiative will be done using established attributional scope 2 market-based accounting.

3. Summary Table

This table will further define the initiative along specific parameters and criteria and inform the working group stage.

Scope Limitations:	▪ Focused on attributional accounting

	▪ Transactions for all market participants, including possible claims ▪ North American Market in Canada and the U.S.
Potential Outcomes:	• An explanation of different hourly transaction methodologies • Best practices for transacting in the hourly market, including geographic constraints and claims guidance • Guidance on how to account for time-stamped information in an inventory
Reasons for Urgency:	▪ Industry groups/corporates may already be attempting to unbundle hourly certificates to transact and may not be doing so credibly, leading to double-counting ▪ Allowing for this type of transaction could expand the market for buyers hoping to follow this procurement strategy
Anticipated Deliverable(s):	▪ Guidance detailing the different ways in which to transact hourly information ▪ Guidance on credible claims to make for hourly information

Other Relevant Initiatives:	▪ RAP CFE Transition Tariffs: A Regulatory Tool for Accelerating Decarbonization
	▪ EnergyTag Granular Certificate Scheme Standard & Granular Certificate Matching Standard
	▪ Utilities
	  o Entergy Arkansas
	  o Madison Gas and Electric RE Rider hourly Tariff
	▪ Tracking systems
	  o M-RETS
	  o PJM-GATS
	  o NEPOOL GIS
	  o NAR

Relation to Existing CEAP Initiatives:	▪ This initiative may build off some of the principles established in the CEAP initiative, set to be completed by EOY 2025: *Hourly Utility Product Design Options in the U.S.* ▪ It may also build on the principles established proposed in the CEAP initiative set to kick-off Q4 2025 and be complete by EOY 2026: Accounting for Utility-Scale Clean Energy Storage
Available Resources:	▪ Princeton papers (Xu & Jenkins, 2022); (Xu, Manocha, Patankar, Jenkins, 2021) ▪ Ever.green retirement of hourly RECs in ERCOT paper ▪ Google Policy Roadmap for hourly CFE ▪ Google hourly CFE paper ▪ Google AES hourly agreement ▪ M-RETS a path to supporting data-driven renewable energy markets paper ▪ Singularity white paper on deliverability ▪ EPA hourly matching of electricity page ▪ Greg Miller article on beyond 100% renewable: policy and practical pathways to hourly RE procurement

	▪ U.S. Dept. Of Treasury Inflation Reduction Act Section 45v (Hydrogen Tax Credit) hourly section ▪ CRS' Readiness for Hourly: Renewable Energy Tracking Systems Report
Potential Challenges:	▪ The market for hourly certificates is very new, and there are not yet established guidance or best practices on which to base a deliverable ▪ Typically, sub-annual (hourly) EAC guidance requires strict geographic granularity
Key Working Group Stakeholders:	▪ Tracking systems (M-RETS, PJM, NEPOOL GIS, NAR) ▪ Current or potential hourly renewable energy market participants ▪ Trading platforms ▪ Brokers ▪ Policy stakeholders involved in making hourly transactions or making relevant guidance