

Criteria for Credible Cross-Market Energy Attribute Certificate Transactions

Draft Proposal | August 2025

1. Problem Statement

The lack of clear, internationally recognized guidance for cross-boundary Energy Attribute Certificate (EAC) transactions creates significant uncertainty for market participants. Current voluntary standards and compliance programs treat the ability to transact across markets differently, with some recognizing a wide range of cross-border exchanges and others restricting them more narrowly. This inconsistency limits procurement options and can undermine claims credibility when renewable generation is sourced across borders, underscoring the need for clear criteria to determine which types of cross-market transactions are credible.

Uncertainty about how different frameworks treat cross-border EACs creates a risk of reduced flexibility in sourcing renewables. Rather than focusing on how to define markets, this project will instead examine the conditions in adjacent markets to identify the types of transactions that can be considered credible across boundaries. Absent clear guidance, buyers, suppliers, and regulators will face challenges aligning credible claims with evolving geographic and temporal matching rules.

This CEAP initiative will answer the question:

- *Are there credible cross-market energy attribute certificate transactions, if so, what are the appropriate criteria?*

2. Proposal Summary

This CEAP initiative will produce guidance on credible cross-market EAC transactions by focusing on the conditions that determine whether transactions across adjacent markets can be considered credible. The project will first state the working definition of a market used in this report (e.g., the electricity sector), recognizing that it may differ from other frameworks, and then set out the criteria by which cross-market transactions should be evaluated. It will examine how these criteria align with existing standards such as GHGP Scope 2, EnergyTag, Green-e® Energy, RE100, the I-TRACK Foundation, and U.S. RPS programs, and incorporate lessons from regulatory precedents in the U.S., EU, and APAC. The guidance will also address temporal matching requirements and the compatibility of different approaches with hourly procurements, while reviewing available data from

regulators, tracking systems, and interconnection studies to minimize risks of double counting. In doing so, this project will provide a comprehensive framework that responds to the uncertainty outlined above, giving buyers, market operators, and regulators a decision matrix and report that set out credible pathways for cross-boundary EAC transactions in both compliance and voluntary markets.

3. Summary Table

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

Scope limitations:	<ul style="list-style-type: none"> • Global focus • Electricity EACs only (no fuels) • Avoided emissions accounting and impact claims excluded
Potential outcomes:	<ul style="list-style-type: none"> • Common principles for EAC transactions and claims across different borders • Decision framework for EAC comparison
Reasons for urgency:	<ul style="list-style-type: none"> • APAC cross-border REC developments (Singapore, Malaysia) • Increased APAC interconnection • Issue not addressed by GHGP's Scope 2 geographic boundaries • Expanding wholesale markets
Anticipated deliverable:	<ul style="list-style-type: none"> • A comprehensive guidance report accompanied by a decision matrix that will spell out the conditions under which cross-boundary EAC transactions can be considered credible. The report will synthesize best practices, regulatory precedents, and existing standards, while the decision matrix will serve as a practical tool for buyers, regulators, and market operators to evaluate proposed transactions. These outputs are intended to reduce uncertainty, align market practices, and support more consistent recognition of cross-market EAC claims.
Other relevant initiatives:	<ul style="list-style-type: none"> • Singapore Cross-Border REC Framework – MTI has tasked the I-TRACK Foundation with creating a bundled cross-border REC framework to guide credible transactions. It focuses on avoiding double counting, ensuring verification, and linking to physical power, and could serve as a regional model. • GHGP Scope 2 Updates – ongoing revisions that may narrow geographic boundaries for attribute use, underscoring the importance of clear transaction criteria. • Carbon Border Adjustment Mechanism – EU framework that excludes market-based instruments, raising questions about the credibility of REC use in trade contexts.
Relation to existing CEAP initiatives:	<ul style="list-style-type: none"> • Best Practices for Power Source and Emissions Disclosure • Supplier Clean Electricity Procurement • Secondary Transactions of Hourly Certificates • Calculating a Residual Mix
Available resources:	<ul style="list-style-type: none"> • Singapore Cross-Border REC Framework – a real-world case study showing how bundled REC transactions can be credibly recognized when electricity is imported or domestic supply is limited,

	<p>highlighting issues like double counting, verification, and harmonization across less mature markets.</p> <ul style="list-style-type: none"> • CHGP Scope 2 Guidance – While it allows flexibility in defining market boundaries, this creates uncertainty for cross-border EAC or REC transactions, highlighting the need for clear criteria. • Green-e® Energy Standard – establishes temporal and spatial requirements for renewable claims. These provisions show how voluntary certification schemes handle cross-border EACs and highlight conditions that this initiative can build into credibility criteria. • The Legal Basis for Renewable Energy Certificates – provides a review of the U.S. legal framework confirming RECs as property rights and essential instruments for compliance and voluntary markets. It underscores that trading RECs—whether bundled or unbundled—transfers ownership of renewable attributes, a principle critical for defining credible cross-border transactions. • EECS Rules – Principles and Rules of Operation of the AIB– highlight European approaches to cross-border recognition of certificates and the mechanisms that could inform broader guidance. • APAC Factbook on Granular Electricity Accounting (EnergyTag) – offers region-specific insights on hourly and granular accounting practices in Asia, helping to frame transaction criteria where grid interconnections are limited. • RE100 Technical Advisory Group – provides corporate perspectives on renewable electricity sourcing rules, including exceptions to cross-border restrictions, offering a benchmark for credible corporate claims. 	
<p>Potential challenges:</p>	<ul style="list-style-type: none"> • Inconsistent recognition of cross-border EACs between compliance and voluntary programs. • Limited interoperability of tracking systems and gaps in interconnection data. • Treatment of bundled vs. unbundled EACs across jurisdictions • Potential double counting when residual mix data is incomplete or misaligned. • Conflicts between state-level RPS imports and voluntary market claims. 	
<p>Key working group stakeholders:</p>	<ul style="list-style-type: none"> • Energy marketers and software providers • Public utility commissions and regulators (U.S., EU, APAC) • Legal Experts (property law) 	<ul style="list-style-type: none"> • EAC tracking systems and grid operators (PJM, AIB, iTRACK) • Corporate clean energy buyers (e.g., RE100 members) • NGOs and standards bodies (WRI, CDP, EnergyTag, Green-e, RE100)