

Beyond annual matching: The evolution of time-stamped RECs - Northmore Gordon

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Removal covers activities that permanently remove CO₂ from the atmosphere such as new forestry plantations, soil carbon improvement or carbon capture and storage. certificates Live Certificate Prices The value of certificates change day-to-day, check todays prices Solar VEECs (VEU PBA) VEU PBA for Large-scale Solar Measurement & Verification (VEU & ESS) M&V; for Large C&I; Efficiency Projects (VEU PBA & ESS PIAM&V;) BESS Calculator Estimate the Peak Reduction Certificate revenue available to your NSW battery project in minutes ERF & Carbon Credit Registration ACCUs for Emission Reduction Projects Boiler Upgrades (VEU & ESS) NSW & VIC Boiler Rebates REC Registration (I-RECs & LGCs) Register renewable assets for I-RECs and LGCs Trade RECs & Carbon with us Trade Local & International Environmental Attribute Certificates moREnewable100 (RECs & Offsets) Reach Global Sustainability Goals with Certificates and Offsets Deemed Certificates (VEU & ESS) NSW & VIC Rebates Global Certificates Environmental Attribute Certificates Australian Programs Australian EAC Programs Case Studies Sectors Articles Team More Close More Open More Northmore Gordon Learn more about Northmore Gordon with the latest news and insights, were to find us, and the extensive terminology used in emissions reductions About Us Who we are & what we do in energy efficiency & decarbonization. Locations Find our offices near you. Contact Us Get in touch with our team. Careers Join our team making a sustainability difference Articles Learn about energy efficiency & carbon reduction. Latest News Stay informed on industry developments. Government Updates Track policy changes impacting your energy use. Accreditations See our certifications for trusted service. Glossary Define key terms in emissions reduction. Beyond annual matching: The evolution of time-stamped RECs Meilin Wu August 18, 2026 Articles Share this article For more than a decade, Renewable Energy Certificates (RECs I-RECs, GOs, TIGRs, LGCs, ZNECs, J-Credits) have underpinned global renewable electricity procurement. By purchasing RECs equivalent to their annual electricity consumption, organisations can demonstrate that an equivalent amount of renewable electricity has been generated and supplied to the grid, supporting commitments under RE100 RE100 is the global corporate renewable energy initiative bringing together large businesses committed to 100% renewable electricity. The members must be influential based on their either their brand, global presence, significant energy use or other characteristics that bring attention to their commitment. All companies must commit to purchasing 100% of their electricity from renewable sources by 2050 and purchase that power in the same location they are using it. Interim targets are 60% by 2030 and 90% by 2040. The program is led by the Climate Group in partnership with the CDP. More , the Science Based Targets initiative (SBTi Science Based Targets initiative), the GHG Greenhouse gases trap heat in the atmosphere. They all have different global warming potentials (GWP) over different time frames, the higher the number, the worse the impact. For simplicity of accounting everything is referenced back to carbon dioxide which has a global warming potential of 1. There are over 200 GHGs listed in the IPCC fifth assessment report, a sample are below. Note that in current carbon accounting standards the 100 year GWP is used. Greenhouse gas 20 year GWP100 year GWPCarbon dioxide CO₂11Methane CH₄8428Hydrofluorocarbon HFC-134a37101300Chlorofluorocarbon CFC-1169004660Nitrous Oxide N₂O264265Sulfur hexafluoride SF₆17,50023,500 Protocol and other voluntary renewable electricity frameworks. But one question is gaining attention: Does it matter when renewable electricity is generated? Increasingly, the answer is yes. From annual matching to hourly matching Traditional REC Renewable Energy Certificate procurement is generally based on annual volumetric matching for Scope 2 emissions from electricity. A company consuming 10,000 MWh of electricity during a calendar year purchases 10,000 MWh of RECs generated within the same year. While this approach has successfully driven demand for renewable energy, it does not distinguish between when renewable electricity is generated and when it is consumed. For example, electricity generated by a solar farm at noon can be matched against electricity consumed at midnight under annual accounting. Although the annual renewable volume matches, this approach does not show whether renewable electricity was

available at the time it was consumed, nor does it necessarily encourage renewable investment during peak demand periods. Time-stamped RECs aim to address this gap. What is a time-stamped REC? Time-stamped RECs, sometimes referred to as granular certificates or hourly energy attribute certificates, include a generation timestamp. This allows electricity consumption to be matched with renewable generation on an hourly—or potentially sub-hourly—basis. Rather than asking: “Did I buy enough renewable electricity this year?” companies can begin asking: “Was renewable electricity available when I was actually consuming power?” This provides a clearer picture of how closely renewable generation aligns with electricity demand. Why is this gaining attention now? The move towards time-based matching is being driven by several factors. First, corporate sustainability programs are becoming more sophisticated. Many organisations that have achieved annual renewable electricity targets are now looking for ways to demonstrate higher-quality procurement. Second, emerging industry initiatives—including discussions within the Greenhouse Gas Protocol The GHG Protocol is the most widely used greenhouse gas accounting standard for companies. It provides guidance on the calculation of scope 1, 2 and 3 emission sources. It is consistent with the ISO 14064 series of accounting standards on greenhouse gases. review process, the Science Based Targets initiative and Climate Group’s work on 24/7 carbon-free energy—are increasingly recognising the importance of temporal matching. While requirements are still evolving, the direction of travel is towards greater transparency over when renewable electricity is generated. Finally, advances in metering and data systems are making hourly accounting more practical. Renewable generation and electricity consumption can now be tracked at much finer intervals than was previously possible. Recent developments The GHG Protocol published its feedback summary from the first public consultation on 29 July 2026. Hourly and regional matching, in the form proposed, received relatively low stakeholder support. A second consultation is expected later in 2026, with a final standard projected for 2027 and implementation potentially beginning in 2028. This is significant because the market had expressed concern that hourly matching could make annual I-RECs non-compliant for Scope 2 market-based reporting. The stakeholder response provides more time for the current instrument regime and may reduce the near-term risk of declining demand for annual I-RECs. EnergyTag has also published a Taiwan-specific analysis examining the country’s potential pathway towards sub-hourly matching. Taiwan currently issues monthly T-RECs despite having 15-minute metering capability. This suggests that a move towards granular or hourly certificates is technically achievable and aligned with the country’s policy direction. Taiwan could therefore become an early mover in 24/7 renewable electricity matching in Asia, ahead of any future requirements adopted by the GHG Protocol. What we are seeing in the market Australia’s time-stamped Renewable Electricity Guarantee of Origin certificates, or REGOs, will also recognise renewable electricity discharged from energy storage. This may allow renewable electricity generated earlier to be matched with periods of peak electricity demand. Leading multinational companies are beginning to pilot time-stamped RECs in selected markets before considering wider implementation. Selected Asian markets are emerging as early pilot locations, supported by sophisticated electricity markets, widespread interval metering and a concentration of regional corporate headquarters. This reflects where the market currently stands. Annual RECs remain the dominant procurement instrument, but forward-looking organisations are exploring how time-of-generation data available through existing mechanisms could strengthen future sustainability reporting and renewable energy strategies before fully time-stamped RECs become widely available. What does this mean for renewable energy markets? Time-stamped RECs are not necessarily a replacement for conventional RECs, but they may represent the next stage in their evolution. Adding temporal information creates new market signals by highlighting when clean electricity is abundant and when it is scarce. Over time, this could encourage greater investment in technologies that improve hourly matching, including battery storage, flexible demand response and complementary renewable generation. For energy buyers, there is no immediate need to replace existing REC procurement programs. Rather, this is an opportunity to understand how procurement expectations are evolving and prepare for a future in which renewable energy claims may increasingly consider not only how much renewable electricity is purchased, but also when it is generated. As corporate decarbonisation strategies mature, time-stamped RECs are likely to become more relevant for organisations seeking more transparent and credible renewable electricity procurement. Contact Northmore Gordon to learn

more about how renewable electricity purchasing is evolving and what time-stamped RECs could mean for your procurement and reporting strategy. [Certificates](#) , [RECs](#) , [Renewable Energy](#) , [Singapore Electricity Market](#) , [VEECs](#) You may also like: [Welcome to our August & September 2026 Compliance Update](#). [Australian Certificate Markets – August 2026 Update](#) [Where's the value in renewable heat?](#) [Latest Updates ASRS Group 3: are you in scope and don't know it?](#) [September 18, 2026](#) [Correct as at 13 September 2026](#). If your company is a large proprietary company, you [Read More »](#) [Solar irrigation upgrades: Don't let certificate funding go unclaimed](#) [August 10, 2026](#) [Irrigation pumps are one of the biggest hidden costs on an Australian farm](#). In particular, if [Read More »](#) [SRES expansion: STC eligibility to increase from 100 kW to 1 MW from October 2026](#) [August 6, 2026](#) [The Australian Government has announced a major expansion of the Small-scale Renewable Energy Scheme, increasing](#) [Read More »](#) [\\$100 million renewable energy program to fast-track grid-ready solar and battery projects](#) [August 4, 2026](#) [The Australian Government has committed \\$100 million to help small and medium-sized renewable energy projects](#) [Read More »](#) [Get in touch Australia 1300 854 561 \(Advisory\) 1300 878 500 \(Certificates\)](#) [Melbourne Suite 1, Level 4 607 Bourke Street Melbourne VIC 3000 Singapore +65 6690 2480 Singapore 1 Keong Saik Road, Singapore 089109](#) Stay up to date Alternatively, complete the form and we will be in touch with you. First Name Last Name Email Phone Number Country [Australia](#) [Singapore](#) Subject Message Send Services [Energy Audit Services](#) [M&V; Services](#) [EEO Assessments](#) [Corporate Energy and Carbon Management](#) [Grants and Program](#) [Strategic Energy Sourcing](#) [Virtual Energy Manager](#) [Climate Active Certification](#) [Sectors](#) [Animal Processing](#) [Chemical Processing](#) [Commercial Buildings](#) [Food & Beverage](#) [Manufacturing](#) [Mining](#) [Oil & Gas](#) [Pharmaceutical & Health Products](#) [Public Sector](#) [Waste & Wastewater](#) [Wood, Paper & Cardboard](#) [Processing Upgrades](#) [Boiler Upgrades](#) [Commercial Lighting](#) [Hot Water Systems](#) [Mid Scale Solar](#) [NABERS](#) [Public Lighting](#) [Refrigerated Display Cabinets](#) [Solar PV](#) [Small Scale UPS](#) [Certificates](#) [Live Certificate Prices](#) [International Renewable Energy Certificates](#) [Tradable Instrument for Global Renewables](#) [Australian Carbon Credit Units](#) [Energy Savings Certificates](#) [Large-scale Generation Certificates](#) [Small-scale Technology Certificates](#) [Victorian Energy Efficiency Certificates](#) [Government Schemes](#) [Emissions Reduction Fund](#) [Energy Savings Scheme](#) [Renewable Energy Target](#) [Victorian Energy Upgrades](#) [Helpful Links](#) [About us](#) [Meet the Team](#) [Careers](#) [Contact us](#) [Articles](#) [News](#) [Glossary](#) [Privacy](#) [Policy](#) [Complaints](#)