



**ENERGY
COMPACTS**

CASE STUDY

UPDATER, INC.

Updater: Advancing 24/7 Carbon-Free Energy in Japan through Blockchain Innovation

Blockchain-based electricity tracking and peer-to-peer renewables energy marketplace.

BLOCKCHAIN-BASED ELECTRICITY TRACKING

UPDATER is a Japanese renewable electricity procurement solution and consultation service provider that assists RE100 companies in achieving their decarbonization goals. UPDATER has developed Enection 2.0, a blockchain-based platform that enables peer-to-peer renewable energy transactions. This platform allows users to trace the origin of their electricity at 30-minute intervals, aligning with international standards for 24/7 Carbon-Free Energy.

Enection 2.0 platform allows consumers to trace the exact origin of their electricity and directly connect with the renewable energy producers behind it. Critically, Enection 2.0 enables granular energy tracking at 30-minute intervals, in line with international standards for 24/7 Carbon-Free Energy. This ensures transparency and credibility in renewable energy sourcing, and contributes to the global shift toward hourly matched carbon-free electricity. The model redefines electricity not as a commodity but as a trust-based relationship between producers and consumers.

By enabling granular energy tracking and traceability, Enection 2.0 promotes greater transparency, accountability, and consumer choice in clean energy sourcing.

IMPACT AT A GLANCE

**Renewable supply
in line with 24/7 CFE
across Japan**

excluding Okinawa



1,259+

Corporate clients
and companies



5,490+

Serviced locations



110,558 MWh

time-matched renewable
electricity supplied (FY2024)



400,000+ tonnes

CO₂ emissions reduced
(cumulative to 2023)

CONNECTING 24/7 CFE TO **LOCAL** **COMMUNITIES**

Through UPDATER's blockchain-based 24/7CFE-compliant platform, they have supplied over 110,000 MWh of time-matched renewable electricity, reducing over 400,000 tons of CO2 emissions.

Through this platform, UPDATER aims to accelerate the deployment of nature-positive and community-based renewable energy across Japan, contributing to the national goal of raising the share of renewables in the country's power mix to over 60% by 2035.

At the core of Enection 2.0 is the belief that clean energy should be personal and empowering. The platform allows consumers to select up to three renewable energy producers from which their electricity is sourced, enabling alignment with their values and corporate mission. Among the available options are solar-sharing projects that co-locate food and energy production, helping farmers increase their income, as well as community-run solar projects where contributions help sustain local initiatives.



Through this model, a portion of each consumer's electricity bill is channeled back to their selected power plants as a "support contribution," deepening the connection between the buyer and the producer. In one case, a consumer who selected a power plant later joined that project as an employee. In another, when users chose a plant located in Onagawa, their contributions funded no-repayment scholarships for local students. Through Enection 2.0, the previously invisible faces behind electricity are now seen and supported by those who benefit from it.

Image above: Enection Power Tracking 2.0 platform

UPDATER joined the 24/7 Carbon-Free Energy Compact because it shares a deep commitment to the principles of verifiable, time-based clean energy procurement. The Compact offers a global platform through which UPDATER can share its work, learn from others, and collaborate across borders to drive more inclusive and effective energy transition models. Unlike traditional clean energy commitments that rely on annual energy balancing, the Compact focuses on hourly carbon-free electricity, providing a more accurate, transparent, and human-centered solution. The company's future vision is a world where every organization regardless of size or geography can choose energy that is truly carbon-free, local, and accountable. The Compact is a critical step in helping make that future a reality.

SHUTA MANO

Senior Executive Officer, UPDATER Inc (Minna-denryoku)

BUILDING THE FOUNDATION FOR HOURLY CARBON-FREE ENERGY

UPDATER's long-term goal is to accelerate the transition to 24/7 Carbon-Free Energy not only in Japan, but across Asia. Central to this goal is enabling more users, corporate and otherwise, to access, trace, and make meaningful use of hourly-matched renewable electricity.

To achieve this, the company launched the first commercial sale (beyond pilot initiatives) of its proprietary electricity tracking system in July 2025. This system is now available to retail electricity providers across the country through a SaaS model. This model offers utilities and energy providers the tools needed to deliver verifiable, transparent, and high-resolution clean energy to customers. It helps build a robust foundation for widespread 24/7 CFE compliance and supports the formation of a trusted and scalable national clean energy infrastructure.



Image: Solar-sharing projects from the community.

In order to build a sustainable energy system in Japan, it is important to expand decentralized renewable energy that is rooted in local communities and takes into consideration the natural environment of each region. Our tracking system can support such renewable energy by adding value to locally produced and consumed electricity, rather than treating it as a commodity. Going forward, we hope to contribute to the achievement of the UN Sustainable Development Goals by expanding our business not only in Japan but also in developing countries.

SHUTA MANO

Senior Executive Officer, UPDATER Inc (Minna-denryoku)



[LEARN MORE ABOUT UPDATER HERE](#)

For more information about the 24/7 Carbon Free Energy Compact, please visit GoCarbonFree247.com and [United Nations Energy website](#).