EXECUTIVE SUMMARY

POWER IN OF THE MANY

A roadmap to explore tokenization opportunities for Solar Renewable Energy Certificates (SRECs) & Guarantee of Origin (GoOs) in Europe

Phase 1: Identifying viable business cases, setting the stage for a possible Phase 2, which will focus on developing a Minimum Viable Product (MVP) and a comprehensive business plan. The initiative leverages blockchain technology to address market and regulatory challenges.

This report is brought to you by 2Tokens in cooperation with our partners



















© 2Tokens, 1 April 2025









Exploring the Future of Renewable Energy: The Tokenization of SRECs and GoOs

The evolution of renewable energy markets is marked by significant shifts towards sustainability and transparency, particularly through the potential integration of blockchain technology. Central to this paper are Solar Renewable Energy Certificates (SRECs) and Guarantees of Origin (GoOs), which serve as mechanisms to validate and encourage the production of renewable energy. The ESG Carbon Tokenization Working Group, led by 2Tokens, is currently exploring the tokenization of these certificates, aiming to enhance market dynamics and efficiency. This initiative tries to further solidify the essence of modernizing the approach to renewable energy through digital transformation.

At the heart of this discussion is the concept of tokenization, which involves converting SRECs and GoOs into blockchain-based digital tokens. This transition promises to provide a more transparent and efficient trading process. "Tokenization could make trading easier, increase transparency, and expand access," the paper notes. By integrating these certificates into decentralized marketplaces, producers and consumers can trade certificates in real time, gaining trust through blockchain's tamper-proof nature.

The discussion also emphasizes the importance of harmonizing certification systems between SRECs and GoOs, which traditionally serve different markets— SRECs being specific to the U.S. solar market and GoOs primarily in Europe covering all renewable sources. The potential for creating interoperable tokens that can represent both types of certificates is revolutionary, allowing for seamless trading and broader market participation. The working group suggests that such tokenization could "reduce the administrative burden of navigating different systems and regulations." This represents a promising frontier in renewable energy markets, with the potential to democratize access for smaller producers, such as homeowners with solar panels.

However, the transition to a tokenized system is filled with challenges. Regulatory frameworks are not harmonized across regions, creating barriers to efficient crossborder trading. An essential point raised in the discussions is the need for regulatory harmonization to prevent fragmentation and ensure regional compliance like currently is being aimed for via, amongst others, the Omnibus regulatory initiative by the European Committee. The paper states, "Tokenization would require harmonizing these regulations to ensure mutual recognition and compliance," highlighting that building a common standard is crucial for success.

The stakeholders involved in SRECs and GoOs, ranging from creators, verifiers, and registries to traders and technology providers, play pivotal roles in this ecosystem. Their collaboration will be key to the successful adoption of a tokenized system. As the paper rightly points out, each group must align their interests to unlock the full potential of tokenization in renewable energy markets.

The market forecast for SRECs in the U.S. and GoOs in Europe signals robust growth in the coming years driven by regulatory pressures and increasing corporate sustainability commitments. The document notes, "The U.S. REC market is projected to grow to \$26.5 billion by 2030," indicating strong demand for renewable certificates. This growth is punctuated by external pressures such as the Paris Agreement, which has necessitated greater adoption of renewable energy solutions globally. Though we have to mention that in light of the current global political developments and views towards climate policies, the expected growth can turn out differently.

As society grapples with climate change and environmental sustainability, the tokenization of renewable energy certificates represents a forward-thinking solution that integrates digital innovation with environmental consciousness. The working group's initiative to create a digital infrastructure for trading renewable energy highlights a crucial intersection between technology and sustainability.

. The potential to facilitate a more efficient and transparent marketplace for SRECs and GoOs could see a more inclusive participation model that benefits producers of all sizes.

In conclusion, as digital transformation reshapes economies worldwide, the tokenization of SRECs and GoOs offer a potential interesting opportunity within renewable energy markets and to broaden the market by including also consumer producers. This initiative reflects the broader trend towards sustainability, transparency, and efficiency in business practices. As digital tokens promise to revolutionize the way renewable energy is traded, stakeholders will need to collaboratively navigate regulatory landscapes and market dynamics to ensure a sustainable and equitable transition as part of the global effort toward a cleaner future.

For a more deeper analysis, we invite you to read the "A roadmap to explore tokenization opportunities for Solar Renewable Energy Certificates (SRECs) & Guarantee of Origin (GoOs) in Europe".

Visit <u>www.powerofthemany.org</u>