



J **Jacobi FT Wilshire Bitcoin ETF**

Decarbonisation and REC Methodology

As of 15/08/2023

Jacobi ASSET
MANAGEMENT

In collaboration with:

zumo[®]

SUSTAINABILITY IS CENTRAL TO VALUE CREATION FOR OUR CLIENTS

What does sustainability mean to us?

We believe sustainability means meeting present-day economic, social, & environmental needs without compromising the ability of future generations to do the same.

Our dedicated sustainability approach stems from a broader commitment to acting as responsible stewards of capital – whereby we promote governance practices that foster long-term shareholder value in terms of:

1. How we run our business

Upholding ESG principles and embarking on a broader journey that emphasises learning and improving our practices along the way

2. How we approach the broader industry

We seek to engage and share best practices with other industry leaders who have demonstrated a commitment to navigating their own sustainability journeys

3. How we build our products

Jacobi Asset Management actively identifies and mitigates negative externalities associated with its investment allocations on a fund-to-fund basis. For example – the Jacobi FT Wilshire Bitcoin ETF holds and transacts Bitcoin, which is associated with a negative carbon footprint externality stemming from the electrical energy required to facilitate the blockchain network. In order to mitigate this impact, we developed a unique approach in collaboration with leading domain experts.

DECARBONISING BITCOIN EXPOSURE WITH RENEWABLE ENERGY CERTIFICATES

In collaboration with:

zumo[®]



Jacobi Asset Management (JAM) facilitates a decarbonised approach to Bitcoin energy consumption by acquiring Renewable Energy Certificates (or RECs) to match the electricity consumption associated with our Bitcoin-related activities with 100% renewable electricity. RECs is another name for Energy Attribute Certificates (EACs) – accounting instruments representing one megawatt-hour (MWh) of renewable electricity and conveying a property right over the environmental attributes of that MWh, such as a zero emissions factor.

Put simply, RECs are proof that energy has been generated from renewable electricity sources such as solar, hydro or wind power, and are the only way to verify the ownership and usage of renewable electricity placed on the grid. Once a REC reaches the end consumer (beneficiary), the REC is retired (cancelled) in the registry so it cannot be double counted or double claimed.

RECs are the standard instrument used to verify renewable energy procurement credentials. Without holding RECs (or other EACs), there is no standardised way to verify renewable procurement credentials or related claims.

JAM works closely with Zumo and our other partners to ensure fund communications and processes are aligned with best practices and our environmental sustainability ambitions, ultimately enabling us to make the following claims:

We purchase 100% renewable electricity to compensate for the electricity used to mine / validate all the Bitcoin we hold

We match the energy usage associated with our BTC activity with 100% renewable electricity

Our Bitcoin holdings and transactions are fully decarbonised

DECARBONISATION PROCESS AND METHODOLOGY IN DETAIL

Pre-investment steps:

A) Estimate

JAM estimates the fund's Bitcoin holdings for the next period (initially quarterly).

B) Promise of proof

Agreements & Proofs

An Agreement is a 'promise of proof'. Due to the way the REC market operates, RECs may not be immediately available, and so they are purchased 'on contract' with delivery of the 'proof' to follow. Agreements are on-chain representation of future proof, and thus hold a similar traceability and immutability value.

Each Agreement and Proof is given its own ID, verifiable on the blockchain.

Jacobi will commit to (and pay for) "Agreements" to purchase RECs in accordance with the electricity consumption related to its Bitcoin activities (see next page for how this is calculated). Agreements are official documents showing that an order for RECs has been placed and the seller is contractually bound to provide it.

Post-investment steps:

1) Jacobi transacts and/or holds BTC

Bitcoin is acquired in proportion to the net demands of our investors. Jacobi Asset Management

2) Zumo calculates the associated electricity consumption

At the end of each quarter, taking into account the amount of BTC held and transacted on-chain during that quarter, Zumo calculates the electricity consumption associated with mining that amount of BTC is calculated and the corresponding number of RECs required, where 1 REC = 1MWh of power.

Zumo uses the publicly available methodology developed by Cambridge Centre for Responsible Investing (CCRI) and Southpole to attribute electricity consumption. Although there is no universally agreed framework or methodology for calculating bitcoin electricity consumption, this is fast becoming the most adopted method. This methodology is available to download [here](#).

3) RECs are purchased on Jacobi's behalf

Zumo purchases the number of RECs calculated in the above step on the fund's behalf. Jacobi retains the proof of purchase for the RECs for its records.

4) RECs are retired on Jacobi's behalf so that they cannot be used again

The energy production underpinning the fund's handling of BTC has now been decarbonised with renewable energy. Jacobi subsequently retires the RECs so they cannot be used again, preventing double-counting.

For examples of Agreements, Proofs and RECs discussed above please see [here](#).

RECs — Frequently Asked Questions

Defining Renewable Energy Certificates

RECs are proof that energy has been generated from renewable electricity sources such as solar, hydro or wind power, and are the only way to verify the ownership and usage of renewable electricity placed on the grid. A REC is another name for an Energy Attribute Certificate (EAC). It is an accounting instrument representing one megawatt-hour (MWh) of renewable electricity that conveys a property right over the environmental attributes of that MWh, such as a zero emissions factor. Once a REC reaches the end consumer (beneficiary), the REC is retired (cancelled) in the registry so it cannot be double counted or double claimed.

Can I buy 100% renewable electricity without RECs?

No. RECs are the standard instrument used globally (under several different names – EACs, GOs etc) that are used to prove ownership of renewable electricity. Without RECs, we would not have seen the tremendous growth in customer-driven renewable energy deployment that we have seen globally in recent years.

Why are RECs important?

Voluntary markets for renewable electricity allow energy customers to drive decarbonisation faster by making decisions that send important market signals today, while also working with governments, regulators, and utilities to increase renewable energy generation.

Are there different types of RECs?

Yes, there are different types of RECs and associated standards across different markets. The generic name is Energy Attribute Certificate (EAC), and the most common EACs in electricity markets are renewable energy certificates (RECs) in the USA, guarantees of origin (GOs) in the EU, and international RECs (I-RECs) in 50+ countries across Africa, Asia, and Latin America. At Zumo, we use the generic term 'Renewable Energy Certificate' to cover all the above as it is the most widely understood term.

Are RECs like carbon offsets?

No, RECs and offsets are inherently different market instruments and should not be confused. Whilst offsets can be used for any aspect of a company's carbon footprint (one offset / credit represents one tonne of CO₂e), RECs relate to electricity consumption only (one REC represents 1 MWh of electricity). This makes RECs an ideal tool to use for digital assets, where the most material part of the carbon footprint relates to electricity consumption. Furthermore, RECs are recognised by the Greenhouse Gas Protocol (see below).

How are RECs used for carbon accounting?

Companies typically use RECs to reduce their emissions from their electricity use (Scope 2 emissions). Some companies are also starting to apply RECs to reduce emissions from electricity use across their value chains (Scope 3). RECs are typically reported through the market-based accounting method outlined in the [Greenhouse Gas Protocol's Corporate Standard](#). This reflects the fact that the RECs give the holder the property right over the zero or near-zero emission attributes. This means that companies that achieve 100% renewable electricity and have the RECs to prove it can report they have zero carbon emissions associated with their electricity consumption.

RECs — Frequently Asked Questions

How do RECs work?

Electrons enter the electricity grid from many different sources, including renewables (such as wind and solar power), fossil fuels (such as natural gas or coal), and nuclear. Because of this, there is no way to know exactly what energy source your electricity comes from, and companies located in areas with a high density of wind or solar electricity generation have no more right to claim this renewable electricity than any other company on the grid. In order to create a market incentive for the procurement of renewables, the 'attributes' of the electricity (e.g. how and where it was generated) are sold separately to the electricity itself. This is fundamentally how renewable electricity markets operate in all parts of the globe.

Why do we need RECs?

Once electrical power is added to the grid, there is no feasible way to track where exactly it goes next. Renewable Energy Certificates represent a verifiable amount of clean electricity that has been added in a specific time-frame. As such, RECs are a conclusive method of proving that a specified amount of electrical power consumption originated from renewable sources.

What's the difference between bundled and unbundled RECs?

RECs are sold 'bundled' (with the electricity) or 'unbundled' (separately to the electricity). In general, for companies that are responsible for using electricity directly, bundled RECs are best (and other options, such as Power Purchase Agreements, may be better still). However, where RECs are purchased for supply chain electricity consumption (Scope 3), as is the case for digital asset holders, unbundled RECs are required given that those holders are not the direct electricity consumers.

Why is it important to power digital assets like Bitcoin with renewable energy sources?

Powering digital assets with renewables ensures companies are taking a proactive position to increase global demand for renewables and help accelerate investments in electric grid decarbonisation.

Can digital assets help to scale the renewables market?

We believe they can. When you purchase RECs it is guaranteed that the corresponding renewable electricity has been generated and that this electricity is your property. The money spent on each REC helps to support the renewable energy project to which it relates, and is a renewable energy subsidy, which will help to scale the growth of the renewables market. As money flows into REC-backed clean energy projects, the suppliers of that renewable energy are incentivised to continue building and expanding renewable energy infrastructure to cater to the demonstrated demand. The value of the REC follows supply/demand dynamics: as demand for a particular type of renewable energy in each market rises, the price of the REC in that market increases—increasing revenues that then help attract more investments to meet demand.



RECs are a market instrument recognised by the GHG Protocol



Ensures that the electricity associated with BTC activity is matched with 100% renewable energy sources



Sends a strong market signal and actively drives renewable energy demand