WHITE PAPER #17

(April 25, 2021)

Asset Pricing and Relative Values, Secondary Solar Markets

All solar projects in the United States benefit from tax incentives. These incentives create a category of investor – a tax-equity investor – and limits the ability of a project owner from selling or transferring their ownership until the sixth year of ownership.

This has created a market in post-tax recapture assets. We have called this class of asset solar run-off, or SRO. These assets can be acquired and rolled into larger portfolios. The durations of the cash flows can be anywhere from one to twenty years. Portfolios are inherently diversified, have attractive current distributions and can perform well through periods of market stress.

Historically, SROs themselves have been an institutional investment and largely inaccessible to individual investors.

Overview of the SROs and SRO Portfolios

The US solar market today stands at 97,000 MW or roughly $150 billion. The run-off portion (the SRO) holds perhaps 30%, or $50 billion. It is large and largely untapped.

As market participants' understanding of SROs increases, the SRO market buyer base is transforming from specialized investors (e. g. tax equity) to long-term asset managers, insurance companies and pension funds.

SROs are Comprised of Established Cash Flows

An SRO portfolio is a type of asset that invests in a diverse pool of U.S. operating solar assets. SROs have several distinctive and highly attractive features, particularly when compared to fixed-rate high yield corporate bonds.

First, the cash flows are derived from many counterparties, thus ensuring the benefits of diversification, reducing credit risk.

Secondly, the individual assets each have multiple years of historical cash flows, whose history is not dependent on any single credit or performance. These assets tend to have a high payment priority, differing from bondholders and preferred stockholders. Portfolios have an estimated standard deviation of .51%, low or minimal default rate and Sharpe ratios over 2.5.

The Investment Case for SRO Portfolio Investment

Secondary market assets trade off of contracted cash flows, on a pre-tax basis. The value curve is the richest (expensive) at the utility-scale level, cheaper in the mid-market, and the most challenging in residential.

Portfolio SROs are attractive to large institutional investors. As a result, un-aggregated assets not in portfolios tend be cheap, presenting the opportunity to roll up the individual assets into larger blocks or portfolios.

Understanding the Drivers of CLO Equity Returns – Hold and Remarketing

The "Hold" Case - Acquiring assets in the target 7-10% IRR (cash, pre-tax) allows us to leverage the equity to achieve equity returns in the mid-teens. Therefore, we are content to hold acquired assets through the term of the individual assets and run off the contracts.

The Remarketing Case – Acquired assets can be aggregated into larger portfolios and sold through to institutional buyers who seek higher yields and who have asset/liability issues. We believe these portfolios can be sold through to these institutions at a premium of $.10 - $.20/W, generating excellent gain on sale and returns on invested equity.

Benefits and Risks of Investing in Portfolios

Benefits

Counterweight to Interest Rate Risk and Equity Risk

SROs assets largely independent of interest rate risk, market risk, and have minimal operating risk.

Long-Term Alpha

SRO portfolios have a unique ability to generate contracted, long-term alpha for investors. Alpha, described as "excess return" is achieved for the portfolio equity on a contracted basis over a period of years, each year.

Diversification

Portfolios are comprised of multiple assets in multiple locations, hence have superior diversification benefits, thus lowering risks to investors.

Risks

Operating Risk

SRO portfolios are operating assets and have operating risk. This can be mitigated by a portfolio-wide operations and maintenance program that proactively addresses operating risk. Portfolios can be run far better than individual assets.

Credit Risk

Portfolios have credit risk and some regulatory risk. Portfolios constructed across wide geographies with multiple assets and counterparties can largely reduce this risk.

Other Risks

"Gray" Risk is a term we use that covers a non – "black and white" event. These can include an event where there is a roof issue, a specific catastrophic event (a fire), or a contractual or operational dispute leading to non-payment. The portfolio approach, again, reduces but does not eliminate the impact of a "gray" event.

For further information, please contact: John Jaffray, F4 Markets, jjaffray@f4markets.com