INVERSCO SOLAR ETF (TAN)

$68.05 USD

Risk: High
Zacks ETF Rank 3 - Hold

Fund Type: Alternative Energy ETFs
Issuer: INVESCO
Benchmark Index: MAC GLOBAL SOLAR ENERGY INDEX
Date of Inception: 04/15/2008
AUM (million): $1,993.18
Number of holdings in the ETF: 53
Assets in top ten holdings: 55.39%
Expense Ratio: 0.69%
Dividend Yield: 0.00%

Price Fundamentals of TAN
Current Price: $68.05
52-Week High: $90.13
52-Week Low: $64.86
NAV (06/30/2023): $71.17
1Yr ETF Ret (07/07/2023): -9.29%

Risk Statistics
Beta (against S&P 500): 1.33
Standard Deviation: 44.59%
R²: 32.64%

TAN Sector Weights

Zacks Opinion
After performing remarkably well to start the year, the solar industry has been under pressure as resurgence in yields took toll on the high growth and high beta sector. Additionally, the pandemic has led to slowdowns in deployment of renewable energy projects hurting the sector’s performance. However, the beaten down prices could be an attractive entry point given President Joe Biden’s push for going greener. The rapidly rising interest in environmental, social and governance investing, and growing investment in clean tech business are adding to the strength.

Key Points
- One of the popular clean energy ETF
- Concentrated exposure to global solar stocks
- High expense ratio and low trading cost

Reasons to Buy
- Increased green energy spending

Reasons to Sell
- Global warming and COVID-19 pandemic

The data on the front page and all the charts (except the sector weights chart) in the report represent market data as of 07/07/2023, while the report’s text and the sector weights chart are as of 06/08/2023.
Holdings Breakdown
The product is concentrated on the top three firms — First Solar, Enphase Energy and SolarEdge Technologies — with at least 9% share each while other firms hold no more than 5% of assets. Information technology takes the largest share at 57.8% followed by utilities (20.6%). From a country look, United States (48.8%), China (18.6%) and Spain (5.2%) take the top three positions.

Performance
Like many other clean energy funds, TAN was off to a strong start in 2023 and lost momentum in February. It picked up to start March but declined sharply in late April. It is showing some stability since May. The ETF has shed about 3% so far this year.

TAN Top 5 Holdings

<table>
<thead>
<tr>
<th>Holding</th>
<th>Weight %</th>
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</thead>
<tbody>
<tr>
<td>First Solar Inc</td>
<td>9.66%</td>
</tr>
<tr>
<td>Enphase Energy Inc</td>
<td>9.50%</td>
</tr>
<tr>
<td>SolarEdge Technologies Inc</td>
<td>9.07%</td>
</tr>
<tr>
<td>Xinyi Solar Holdings Ltd</td>
<td>4.98%</td>
</tr>
<tr>
<td>GCL Technology Holdings Ltd</td>
<td>4.82%</td>
</tr>
</tbody>
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Investment Objective
The fund seeks to match the price and yield of the MAC Global Solar Energy Index, before fees and expenses. The ETF holds 53 stocks in the basket.

Analysis
This ETF is appropriate for investors targeting the pure play exposure to the solar industry. It charges 69 bps in fees per year from investors while volume is good at around 595,000 shares a day. This ensures a tight bid/ask spread.

2-Year Comparative

<table>
<thead>
<tr>
<th>Fundamentals</th>
<th>TAN</th>
<th>ICLN</th>
<th>QCLN</th>
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<tbody>
<tr>
<td>Zacks Rank</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Price</td>
<td>$68.05</td>
<td>$17.91</td>
<td>$52.61</td>
</tr>
<tr>
<td>AUM (million)</td>
<td>$1,993.18</td>
<td>$4,128.26</td>
<td>$1,604.61</td>
</tr>
<tr>
<td>Expense Ratio</td>
<td>0.69%</td>
<td>0.40%</td>
<td>0.58%</td>
</tr>
<tr>
<td>Dividend Yield</td>
<td>0.00%</td>
<td>0.90%</td>
<td>0.67%</td>
</tr>
<tr>
<td>Assets in top 10</td>
<td>55.39%</td>
<td>50.43%</td>
<td>57.19%</td>
</tr>
<tr>
<td>Beta</td>
<td>1.33</td>
<td>1.07</td>
<td>1.47</td>
</tr>
<tr>
<td>YTD % Price Change (1)</td>
<td>-6.70%</td>
<td>-9.15%</td>
<td>11.93%</td>
</tr>
</tbody>
</table>

(1) Returns are net of fees. Fees charged by investment advisors have not been taken into consideration. Returns would be less if those were included

Description
Launched in April 2008, The Invesco Solar ETF (TAN) is a passively managed fund designed to deliver the returns of the companies in the solar energy industry across the globe. With total assets of about $2 billion, TAN is the one of the popular choices in the clean energy space.
Glossary

ACTIVE MANAGEMENT: A portfolio management strategy where the manager uses variety of skills and attributes (like top-down approach, bottom-up approach, value investing, growth investing or absolute returns strategy) in the portfolio so that the fund outperforms the benchmark index.

ALPHA: A measure of outperformance that can be calculated as the return of the fund minus the benchmark's return. A positive alpha indicates the fund has outperformed the benchmark index whereas negative alpha means underperformance.

AMERICAN DEPOSITORY RECEIPT: A negotiable non-US security that trades in the US financial market.

AUTHORIZED PARTICIPANTS: An entity chosen by an ETF sponsor to undertake the responsibility of obtaining the underlying assets needed to create an ETF. Authorized participants are typically large institutional organizations, such as market makers or specialists.

AVERAGE YIELD TO MATURITY: The expected rate of return on a fund's portfolio if it is held until the maturity while reinvesting all coupon payments at the bond yield.

BASKET: A portfolio of several stocks or securities that are selected for the inclusion in the fund with different weightings.

BETA: A measure of risk compared to the market benchmark. A beta of less than 1 indicates that the fund is less volatile than the market and vice versa.

BID/ASK SPREAD: The difference between the highest price that a buyer is willing to pay (often called bid price) for the underlying assets of securities of the fund and the lowest price that a seller is willing to accept (often called as offer or ask price) for it.

CONTRARIAN: An investment style that goes against prevailing market trends (i.e. against the thinking of many) by buying assets that are performing poorly and then selling when they perform well.

CREATION UNIT: A set of securities or underlying assets that can be created or redeemed by Authorized Participants for a certain number of ETF shares with the fund or trust. The creation units can vary in size ranging from 25,000 to 600,000 shares each.

DIVIDEND YIELD: A financial ratio that measures how much a company pays out in dividends each year relative to its share price. It can be calculated as annual dividend per share divided by price per share.

EFFECTIVE DURATION: A measure of a fund's interest-rate sensitivity. The longer the duration, the more sensitive is the fund to the changes in interest rates.

ENHANCED INDEXING: An investment idea that attempts to amplify the returns of an underlying asset or the fund with lower tracking error. Enhanced indexing combines elements of both passive and active management.

EXCHANGE TRADED FUND: The fund represents a basket of securities (that typically track an index), and is listed and trades like stocks on an exchange. ETFs can be traded throughout the day in amounts as little as one share.

EXCHANGE-TRADED NOTE: The note is a senior, unsecured, unsubordinated debt issued by a major bank. It has a maturity date and is backed only by the credit of the issuer. The ETN however, do not actually hold any security, instead an issuing bank promises to pay to investors the amount reflected by the index's performance (minus fees).

EXPENSE RATIO: An annual fee that the fund or ETF charge from the investors in order to provide exposure to the underlying asset.

FUND OF FUNDS: A fund that invests in other funds instead of investing directly in stocks, bonds or other securities.

FUNDAMENTAL INDEXING: A type of equity index in which stocks or securities are selected based on fundamental metrics such as revenue, dividend rates, earnings or book value.

INDEX: An imaginary portfolio of securities representing a particular market or a portion of it.

INVERSE ETF: An ETF that provides opposite (inverse) exposure in the underlying index though use of various financial and money market instruments over a specified period of time. This ETF is similar to holding a short position in order to take profit from the falling prices.

INVESTMENT STYLE: A different style of investing such as growth, value and blend in a basket of asset.

LEVERAGED ETF: An ETF that uses various financial instruments to amplify the returns (up to 3 times) of the underlying index over a specified period of time.
LIQUIDITY: The degree to which an asset or security can be bought or sold in the market without affecting the asset's price. Liquidity is characterized by a high level of trading activity.

MARKET CAPITALIZATION: Represents the aggregate value of the fund or underlying asset.

NET ASSET VALUE: Value of an ETF on per share basis and is calculated as total asset minus total liabilities divided by number of shares.

PASSIVE MANAGEMENT: A portfolio management strategy where the fund is the mirror image of the performance of the benchmark index.

PORTFOLIO TURNOVER: A percentage of underlying assets bought and sold in a given year.

R-SQUARED: A measure of correlation with the market benchmark. An R-Squared of 100 indicates perfect correlation of the fund that of market while an R-Squared of 0 indicates no correlation.

SECTOR ROTATION: A strategy that involves moving from one sector to another by selling the underlying assets or securities of a sector and purchasing securities or assets in another.

SEC YIELD: A standard yield that the bond funds must pay to its shareholders based on the most recent 30-day period covered by the fund's filings with the SEC.

SHORT ETF: An investment strategy that offers to take short position in the underlying index through various financial instruments.

STYLE BOX: A visual representation of the fund, created by Morningstar, to determine risk-return structures of the portfolio. A style box is comprised of nine squares, or categories, that classify securities by size (small, mid and large cap) along the vertical axis and by value, growth and blend characteristics along the horizontal axis.

TARGET DATE FUND: A fund that invests exclusively in the assets or securities with a certain defined maturity.

TRACKING ERROR: A measure of how closely a portfolio follows the benchmark index. It is calculated as the difference between the returns of fund portfolio and the benchmark index.

TREASURY INFLATION PROTECTED SECURITIES: The bonds that are issued by the U.S. Treasury to protect against inflation. These securities pay interest on an inflated-principal amount (principal rises with inflation) and when the securities mature, investors get either the inflation-adjusted principal or the original principal, whichever is greater.

VOLATILITY: A measure of risk calculated by the annualized daily movement in the fund price. The lower the volatility of the fund the better it is.

VOLUME: The number of shares traded in the market during a given period of time.

YIELD CURVE: A line that plots the interest rates of bonds having equal credit quality but differing maturity dates. The yield curve provides an idea of future interest rate change and economic activity. It generally compares the three-month, two-year, five-year and 30-year U.S. Treasury debt.

WEIGHTED MATURITY: The remaining time to maturity of the underlying securities in a portfolio. A fund with a short average maturity is more sensitive to current interest rate fluctuations than one with longer average maturity.

Disclosure
This material is being provided for informational purposes only and nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security. No recommendation or advice is being given as to whether any investment or strategy is suitable for a particular investor. It should not be assumed that any investments in securities, companies, sectors or markets identified and described were or will be profitable. All information is current as of the date of herein and is subject to change without notice. Any views or opinions expressed may not reflect those of the firm as a whole. Please read the prospectus carefully.

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**Additional Disclosure**

The Zacks ETF Rank is a scale of 1 to 5 as follows:

- Rank 1: Strong Buy
- Rank 2: Buy
- Rank 3: Hold
- Rank 4: Sell
- Rank 5: Strong Sell

In addition to the assigned Zacks ETF Rank, each ETF includes a measure of its associated risk as follows:

- Low
- Medium
- High

Rank may change without prior notice due to changing fund information.