US Solar Fund

USFP invests and operates solar power projects in North America...

Update
10 June 2020

Summary

US Solar Fund (USF/USFP) targets a dividend of 5.5% of the IPO price, with the aim of increasing this incrementally as well as generating some capital appreciation through investment in a diversified portfolio of solar power projects in North America. The managers target a total return on investments of c. 7.5% p.a.

The managers, Australia-based (with offices in the US) New Energy Solar Manager, seek to invest in sites at the construction stage. At this stage sites for development will have been secured, and power purchase agreements (PPAs) put in place with investment grade counterparties. USFP provides equity capital and (where applicable) arranges debt and tax equity financing for construction. The managers believe that this approach generates superior returns on capital compared with investing only in operating assets, as many participants only enter the market subsequent to construction being completed (which results in a more competitive pricing environment). The managers can also invest in operational stage projects, if sufficiently attractive pricing means that high enough returns are available.

PPA contracts are typically of an extended tenure, in comparison to UK and European PPA agreements. USFP currently has PPAs which average c. 15.5 years remaining (as of 31/03/2020), with fixed or escalating prices for energy supply over this term.

USFP currently trades on a premium of c. 0.5%, the lowest premium seen in the broader renewable energy infrastructure sector. We examine some of the reasons for this in the **Discount section**, but with cash flows unimpaired the fund's NAV valuations have proved resilient during Q1 2020 (see the valuation methodology set out in the **Portfolio section**).

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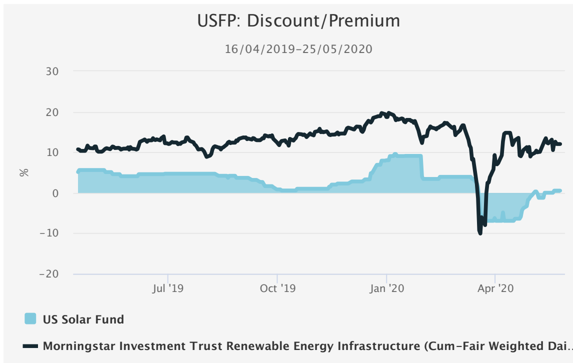
Key Information:

Price (p)	96
Discount (%)	0.0
OCF (%)	0.00
Yield (%)	2.1
Gearing (%)	0
Ticker	USF/ USFP
Market cap (£)	187,614,525



Kepler View

Most gamblers will aver that there is no such thing as a 'sure thing'. Despite this, the managers of USFP are operating in a market whereby general demand is close to being assured, but also where pricing for their specific product is contractually assured to a great degree for, on average, the next 15 years.

As such, once all of USFP's assets are deployed, the 5.5cents dividend stream looks relatively safe. The relative merits of the strategy (and the extremely long term contracted cashflows) to other renewable infrastructure plays likely pivot on considerations of the outlook for global inflationary pressures, and the relative fortunes of GBP relative to the USD.

In a disinflationary or deflationary environment, the long-term fixed price agreements of the PPAs within USFP likely offer a relative benefit; however, the relative lack of flexibility to alter pricing in an environment of wider inflationary pressures could prove a relative headwind. That this is an avowedly USD based product should offer some downside protection in the current environment, with most downside likely emanating from the solvency of the company's PPA counterparties (though even this does not rule either the PPA or the power output worthless).

For UK income investors, USFP has full exposure to the US dollar, which (when translated back to Sterling) is likely to deliver some variability. That said, historically when the world economy suffers a shock, it is usually the USD that rallies.

BULL
Cash flows/income streams look highly assured; low exposure to electricity price
Further deployment of capital should offer some NAV uplift
At present the lowest premium in peer group

BEAR
Surety of long-term contracts reduces flexibility if inflation increases
Gearing can increase downside risks from individual projects
USD FX risk to GBP investors

Portfolio

US Solar Fund (USF/USFP) aims to generate attractive and sustainable dividends – with an element of capital growth – by investing in a diversified portfolio of solar power assets in North America and other OECD countries in the Americas. Managed by the Australian-based New Energy Solar Manager (which also has offices in the US), USFP aims to pay quarterly distributions in February, May, August and November. Once all assets are operational, USFP aims for a target distribution yield of 5.5%+ of the IPO price ($0.055 on a $1 IPO per share price). The trust also targets a total return (net of fees) in excess of 7.5% over the expected life of the assets.

The managers will invest in a diversified portfolio of solar power assets in North America, looking to agree long-term power purchase agreements (PPAs) with investment grade counterparties. Having listed in April 2019, the managers anticipate USFP being fully invested by the end of 2020 and able to cover its target dividend from income in Q1 2021. At the end of May 2020, c. 85% of the trust's IPO proceeds have been committed or invested, with the balance earmarked for prospective purchases and/or the optional refinancing of one of its recent investments. Further equity raises are likely to continue to build the portfolio, as the managers believe there remains a substantial pipeline of attractive opportunities.

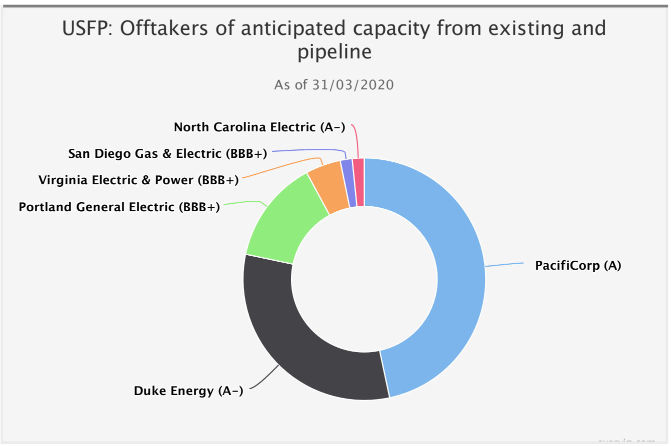
PPAs are contracts agreed with third parties to sell them the electricity output of the solar plants that USFP builds and/or owns. These agreements see USFP contract to sell the entirety (at present) of its output at an agreed rate for an agreed period, with the managers typically targeting a weighted average portfolio PPA term of 15 years. Currently they have a capacity-weighted average PPA agreement length of c. 15.5 years (as of 31/03/2020). This is a key differentiator to UK and European investing peers in the AIC Renewable Energy Infrastructure sector.

We understand that, typically, further protections for revenues are built into the contracts. USFP's existing PPAs oblige the offtakers (i.e. purchasers) to purchase the full amount of the output of USFP's assets. In the event of a sharp reduction in electricity demand, these PPAs would place USFP behind multiple other sources of power generation for curtailment.

USFP's offtakers of electricity are all investment grade, and reasonably diversified by capacity across different purchasers. In the chart below we can see the current split across existing operational assets, pipeline assets and assets under construction – including the S&P credit rating of each counterparty.

The US is already the world's second largest solar energy market, and there is rapid growth forecast in the pipeline. New Energy Solar Manager estimates c. $38bn of capital investment will be required in the US solar market up to 2024, and has itself identified a pipeline of c. $5bn in potential opportunities for investment.

Fig.1: Offtakers (Purchasers) As A % Of Anticipated Capacity



Source: New Energy Solar, as at 31/03/2020

In southern and south-western US states solar energy is already amongst the cheapest forms of energy on a subsidy-free basis, having seen rapid reductions in costs in recent years. Nonetheless, projects remain subsidised through the investment tax credit (ITC) scheme which allows a percentage of project value to be offset against federal tax liabilities. Historic projects have attracted an ITC rate of c. 30%; this has since dropped to 26%, and will drop, in steps, to a permanent rate of 10% in 2022. Additionally solar projects are eligible to use accelerated depreciation, which allows depreciation of up to 85% of the project's value over the first five years of operation – subject to customary corporate tax and accounting limitations.

The effective subsidy regime in the US therefore differs from UK and European subsidy regimes. In the US it is effectively the construction of renewable assets that is subsidised, rather than the cash flows resulting from energy production.

The ITC and accelerated depreciation regime is sufficiently generous that the created tax credit and depreciation deductions often exceed the near-term tax liabilities and taxable income of the owners of solar plants at the time they are placed in service. Consequently construction costs are split with capital partners through a limited liability partnership. Typical partners might be financial institutions or large corporates who have larger tax liabilities and annual taxable income. In USFP's case, project investments have been structured with U.S. Bank or Wells Fargo as tax equity partners. Both USFP and the tax equity partner contribute capital towards projects, but USFP generates its return by receiving a majority of the cash flow subsequently generated whilst the tax equity partner generates its return by using the ITC to offset tax it would otherwise pay across the rest of its business, and the depreciation deductions to offset taxable income in the current or subsequent years. This improves the Returns on Capital available to USFP (since they are deploying a smaller amount of capital to generate greater future cashflow). Importantly, that agreement is fixed at the outset, locking in place the benefits for USFP, with the tax equity partner retaining the risk that the tax credit is less useful than expected (for example if its wider group profits are lower, or take longer to arise, than expected, reducing the value to it of the tax credit).

Operationally, USFP will invest in solar power sites where the site permissions are already agreed and PPAs are already in place. At the current stage of development of the US solar industry, the developers who have created the groundwork for these projects are typically incentivised to sell a site before construction, so that they can develop further potential projects. As noted above, a very significant pipeline of development requirements is projected.

The managers note their preference for investing once binary development risks (i.e. those risks which could prevent the project proceeding) have been removed, and plants are ready to start construction. This phase is earlier in the development process than is seen in most UK and European renewable energy infrastructure peers, who have typically preferred to invest post-construction. By investing at the construction stage, USFP ostensibly incurs construction risks, including potential cost inflation; however fixed-time and fixed-cost construction contracts are in place at the time when USFP invests. The managers believe that residual construction risk is more than compensated for by the commensurately superior returns available on investment at this stage, noting there is less competition to invest at this stage.

Construction can be undertaken fairly rapidly on these projects. As of 31/05/2020, USFP has a capacity of c. 215MWdc (megawatts of direct current) in operation, with a further c. 228MWdc under construction and expected to be operating by the end of 2020.

As a result of the PPAs being in place, the cash flows and revenues that USFP generates should remain consistent and predictable, particularly once all capital is deployed. The main risks arise from the creditworthiness of the offtakers (though the fact that USFP only deals with investment grade counterparties should keep this risk relatively low), and from inflation eroding the real value of income streams. The latter is worth consideration as the PPA agreements will be split between those with fixed streams at set prices and those which have prices escalating on an agreed schedule. If inflation were to significantly outstrip the effects of any price escalation, this would erode the real value of the income streams already fixed. However, with USFP's power assets expected to have useful lives of around 35 years, and only 15 years of output already contracted, the ability to agree in future the prices at which to sell the other 20 years of expected output should further offset negative inflationary impacts.

The nature of the US regulatory and investment regimes in these assets differs from UK assets, which have much shorter PPAs and are more exposed to the medium-term price of electricity. Thus, USFP offers the advantage of a more robust and stable cashflow; but suffers the downside if inflation picks up substantially of having fixed its sales prices for the next 15 years.

USFP's investments are purely US based and therefore the fund is operating, investing, reporting and distributing in US dollars. As a result, UK investors incur an element of currency volatility. USD appreciation relative to GBP would be a tailwind to returns, while the converse is also true. Both GBP and USD share quotes are available for the company's single share class: the codes are USFP and USF respectively. The sterling quote, USFP, is provided solely for ease of trading for UK investors; i.e. the FX exposure is not hedged.

Periodic NAV valuations are undertaken by applying a discounted cash flow (DCF) analysis on the cash flows being generated, though construction assets will be carried at historical cost. Valuations of the underlying assets are undertaken by an independent third party every six months at the end of June and December, whilst the investment manager undertakes this assessment in March and September. The DCF analysis assesses the fair value of each asset based upon the expected future cash flows, inputting various assumptions on revenues, costs and an appropriate discount rate range. This valuation methodology will include an assessment of several factors, including discount rates from global peers and on similar infrastructure asset classes. Some NAV uplift should reasonably be expected as the remaining cash is deployed: as cash flows are proven, and construction risks eliminated, the discount rate applied to future cash flows might be expected to reduce slightly, increasing NAV.

The recent COVID-19 pandemic and associated shutdown has had limited effects on USFP operationally. As highlighted above, the PPAs in place put them further down the list of suppliers to be curtailed in the face of a demand shortfall, and they have had – and anticipate – no curtailment instructions thus far. Construction projects under way are already at a stage where limited labour interaction at close quarters is required, though shortages in supply may impair further developments. We understand that the managers retain an inventory of small parts for any potential repairs that may be required, in case supply chains are impaired; and that major parts for construction which might need to be imported (such as solar panels) are already in-country.

Gearing

USFP does not presently employ gearing at fund level. This is because the managers are still in the process of allocating the proceeds of the IPO, and although they do not have a stated intention to employ amortising debt at the fund level, have said that they may put in place a revolving credit facility as a bridge to the tap issue of equity.

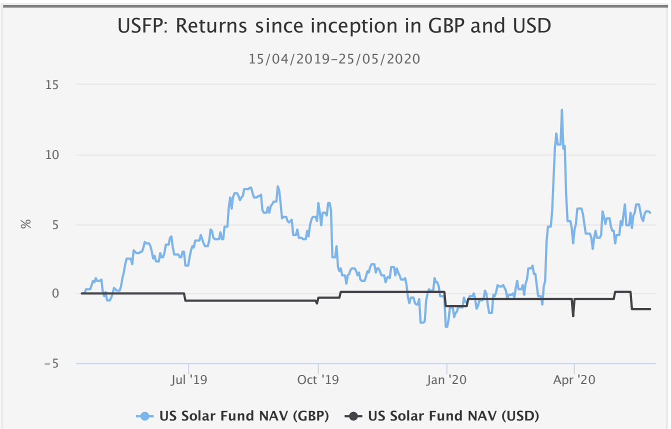
The investment model does, however, utilise significant asset-level gearing. USFP intends to target long-term gearing of up to 50% at the time of drawdown, to boost expected returns. As of the previous annual report of 31/12/2019, borrowings equating to c. 10.5% of Gross Asset Value (GAV) had been drawn upon. With the (at the time) pending 'Acquisition Four' accounted for, this will have increased to c. 45.1%.

USFP may obtain temporary debt finance for solar power assets during construction and during the first year of operations as a bridge to some or all of USFP's ultimate equity investment and pending contracted cash contributions from tax equity partners. Debt on projects would otherwise be expected to be long-term in nature. Aggregate short- and long-term debt divided by GAV at the time of drawdown is limited to 75%. Long-term debt used to finance operational assets relative to GAV cannot exceed 50%. Limits applied at the project level will also apply at the consolidated level for USFP.

Returns

USFP launched in April 2019, and as such has a limited track record. Since inception, USFP has generated NAV and share price total returns of c. 5.8% and 1.2% respectively in GBP terms (as of 26/05/2020). NAV returns thus far have, however, been almost wholly driven by the exchange rate changes between USD and GBP; this is to be expected as the trust continues to develop operationally in the early

Fig.2: Returns Since Inception In USD And GBP



Source: Morningstar

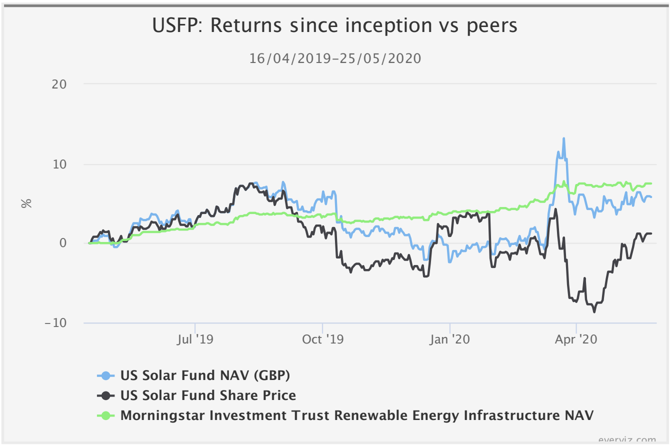
stage of both USFP and the operating life of the underlying assets. We can see the divergence in USD and GBP returns below:

The wider peer group over this same period has seen NAV and share price returns of c. 7.5% and 6.7% respectively. USFP's share price has therefore lagged, and the trust remains on a very modest premium to NAV compared to peers, which trade on average premiums of 12.0%. Dividends totalling $0.019 per share have been paid thus far, contributing c. 1.9% to total returns.

In our view the company's smaller size – and that fact that to date it has paid dividends at only 2c annualised (0.5c per quarter), in line with IPO targets for the construction period – will likely be holding the share price back. We note that USFP is expecting to grow in due course through the further issue of shares, and that it has said it is in a strong position to commence paying dividends at 5.5c annualised from 2021.

NAV levels in USD terms remained essentially unchanged throughout Q1 2020, as the cash flows on which the valuation methodology is based remained unimpaired, though adjustments to the discount rate applied may affect this as and when updated. As cash remaining from the IPO is further invested and operations come onstream, this should see an uplift in NAV as projects move from being construction stage investments to being fully operational – as well as the effect of the prodigious cash flows from generating electricity.

Fig.3: Returns Since Inception In USD And GBP



Source: Morningstar

Dividend

Dividends paid thus far over USFP's relatively short life have equated to c. $0.019 per share. Consequently USFP currently yields c. 2.2% (as of 26/05/2020) on a historic basis, on a share price of $0.96.

As we discuss in the **Portfolio section**, part of the trust's strategy is to invest in assets at the construction stage, even though they are initially not income-producing. That said, income generation is a primary objective. The managers believe that in 2021 the target yield of c. 5.5% of the IPO price of $1, should be fully cash covered as assets become fully operational. The target dividend of $0.055 per share translates into a yield of c. 5.8% at the current price. This outcome would place it above the peer group average level of c. 5.3% at present. Trusts within the peer group currently show yields in a range between c. 2.2% and 6.6%.

The managers anticipate that the target dividend should be fully covered by income in 2021.

Management

USFP is managed by Australian-based New Energy Solar Manager (NESM). NESM's investment management team comprises over 20 professionals based in New York and Sydney, focusing on acquisition, asset management and operations. NESM also manages New Energy Solar, an Australian investment product focused on renewable energy infrastructure in the US and Australia. At the time of USFP's listing, New Solar Energy were the 5th largest investor globally in solar projects, with their various investment vehicles having committed approximately US$1.2bn to over 50 acquired solar projects.

Subsequent to one of USFP's project companies being subject to a payment fraud, in respect of which USFP has since recovered all of its money, NESM (with the support of the board) opted to appoint a global accounting firm to undertake a review of their financial processes and controls. Whilst this review found no material deficiencies, the manager took steps to implement enhancements suggested.

The three-person board contains substantial experience across the energy, infrastructure, banking, fund management and corporate advisory sectors. Board members also have extensive experience in investment trusts.

Discount

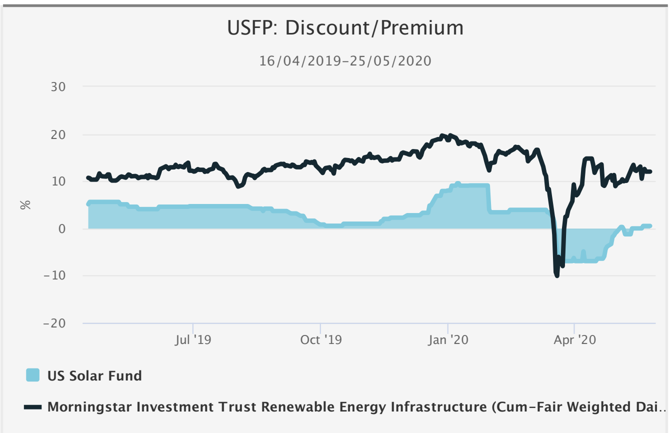
USFP currently trades at a premium of c. 0.5% (as of 25/05/2020). This is the narrowest premium in the AIC Renewable Energy Infrastructure sector at the time of writing. The limited track record, small size of the fund (and concomitant relatively low level of trading liquidity) seem likely to be factors. Similarly, the low yield (a function of ongoing deployment of IPO-raised capital) and perceived cash-drag have also likely impeded a larger premium developing. On the other hand, we discuss in the **Portfolio section** the relatively fixed nature of USFP's revenues seems likely to have kept NAV volatility lower than its peers over recent months.

The above factors are, in our view, likely the more important factor in USFP trading at a significantly lower premium to its peers. As a general rule, however, rigid nominal cashflows should – in our view – prove a tailwind in a disinflationary or deflationary environment. By contrast, if investors anticipate a significant near-term uptick in inflation (as some have in recent months following extraordinary policy stimulus and monetary expansion at a time of destruction of significant supply capacity), this could likely be a disadvantage to USFP relative to its peers.

The sharp fall in the premium and switch to a discount came against a backdrop of a general market sell-off. However, it also occurred shortly after the managers announced that they had been the victims of a fraud relating to contracted construction payments totalling c. $6.9m. These payments were made from a USFP project company bank account to a third party US bank account after fraudulent invoices were submitted. The board and the manager launched an immediate investigation; they subsequently recovered all of the $6.9m, and ascertained that there was no evidence of collusion from within the company.

We understand a significant proportion of USFP's shares are held by institutional shareholders; combined with the trust's relatively low trading volumes, it seems fair to extrapolate that a small increase in buying or selling activity could significantly impact the premium or discount.

Fig.4: Premium/Discount Since Inception



Source: Morningstar

Charges

USFP has an ongoing charges figure (OCF) of 1.5% p.a., compared to the Renewable Energy Infrastructure weighted sector average of c. 1.15% (source: AIC). USFP's OCF is expected to trend towards the sector average as the trust grows, and operating costs become a smaller percentage of NAV. The investment manager (New Energy Solar) receives a tiered management fee depending on the level of assets under management. This is charged as follows:

Up to $500m: 1.0% p.a.

$500m-$1bn: 0.9% p.a.

Over $1bn: 0.8% p.a.

All figures are charged on NAV.

10% of the management fee is payable in the form of ordinary shares, which aligns the manager with the share price.

USFP has a Key Information Document Reduction in Yield (KID RIY) figure of c. 2.04% looking out one year at present. This figure is currently forecast to fall to 1.67% over three years and 1.52% over five years.

ESG

On a purely quantitative basis, USFP will screen well for ESG considerations, particularly environmental considerations given the trust's focus on solar energy. The investment strategy underpinning USFP is highly cognisant of global efforts to decarbonise economies, and seeks to generate emission-free energy at optimal operational efficiency within the trust's operations. As of March 2020, USFP's portfolio of solar plants is anticipated to displace over 530,000 tonnes of CO_2 emissions – once all assets are operational. The managers note that this is equivalent to removing more than 117,000 cars from US roads every year.

Consideration of ESG factors is deemed integral to the investment process, helping the managers to assess both risks and opportunities. We understand that USFP will report regularly on the implementation of ESG and sustainability principles within its business.

Disclaimer