

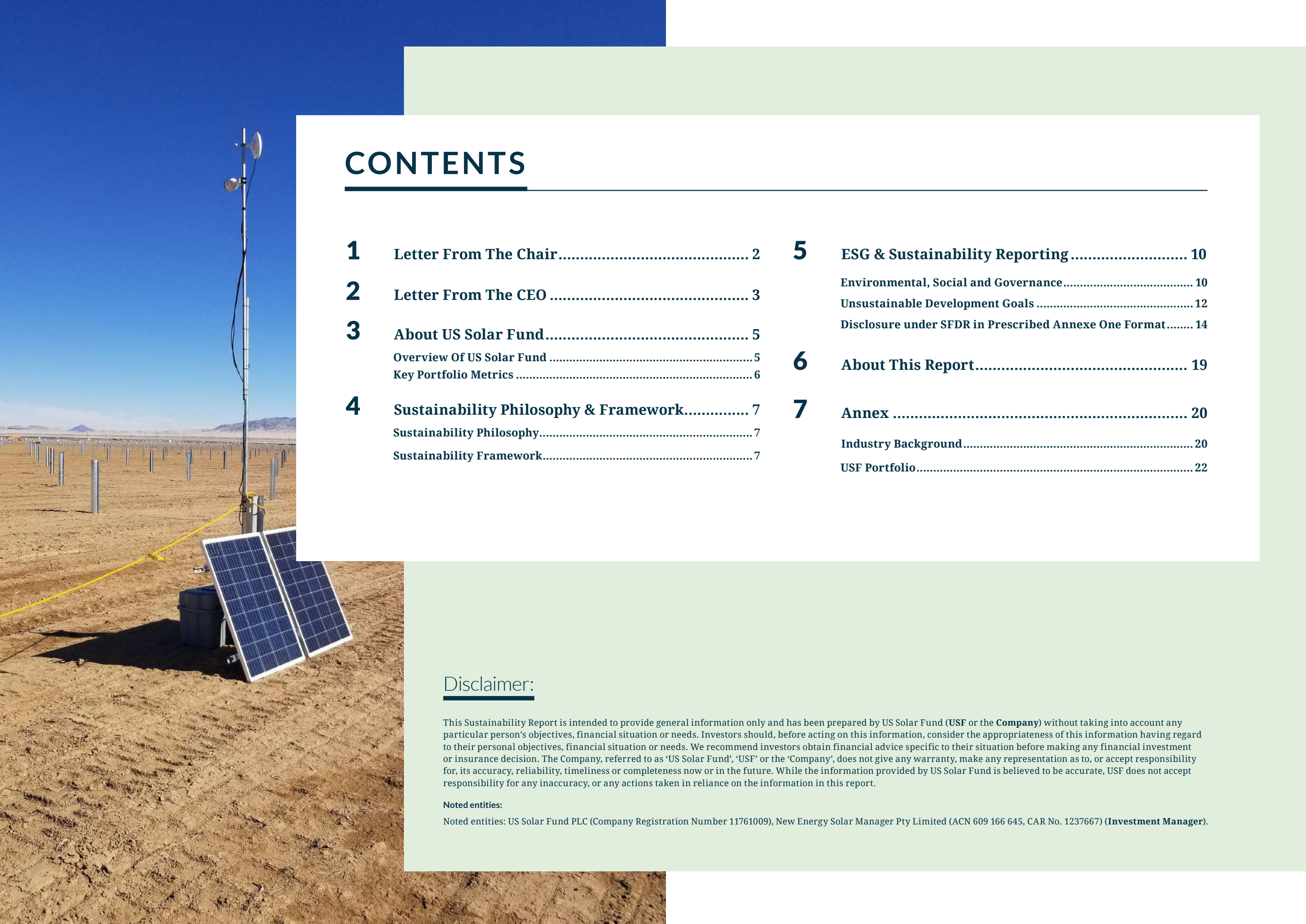


## SUSTAINABILITY REPORT

2021







# CONTENTS

<b>1</b>	<b>Letter From The Chair.....</b>	<b>2</b>	<b>5</b>	<b>ESG &amp; Sustainability Reporting .....</b>	<b>10</b>
<b>2</b>	<b>Letter From The CEO .....</b>	<b>3</b>		Environmental, Social and Governance.....	10
<b>3</b>	<b>About US Solar Fund.....</b>	<b>5</b>		Unsustainable Development Goals .....	12
	Overview Of US Solar Fund .....	5		Disclosure under SFDR in Prescribed Annexe One Format.....	14
	Key Portfolio Metrics .....	6	<b>6</b>	<b>About This Report.....</b>	<b>19</b>
<b>4</b>	<b>Sustainability Philosophy &amp; Framework.....</b>	<b>7</b>	<b>7</b>	<b>Annex .....</b>	<b>20</b>
	Sustainability Philosophy.....	7		Industry Background.....	20
	Sustainability Framework.....	7		USF Portfolio.....	22

## Disclaimer:

This Sustainability Report is intended to provide general information only and has been prepared by US Solar Fund (**USF** or the **Company**) without taking into account any particular person’s objectives, financial situation or needs. Investors should, before acting on this information, consider the appropriateness of this information having regard to their personal objectives, financial situation or needs. We recommend investors obtain financial advice specific to their situation before making any financial investment or insurance decision. The Company, referred to as ‘US Solar Fund’, ‘USF’ or the ‘Company’, does not give any warranty, make any representation as to, or accept responsibility for, its accuracy, reliability, timeliness or completeness now or in the future. While the information provided by US Solar Fund is believed to be accurate, USF does not accept responsibility for any inaccuracy, or any actions taken in reliance on the information in this report.

**Noted entities:**

Noted entities: US Solar Fund PLC (Company Registration Number 11761009), New Energy Solar Manager Pty Limited (ACN 609 166 645, CAR No. 1237667) (**Investment Manager**).



# 1. Letter From The Chair

USF's Board (**Board**) along with its Investment Manager, New Energy Solar Manager (**NESM** or the **Investment Manager**), has consistently reported on sustainability and environmental, social, and governance (**ESG**) considerations through USF's annual and interim reporting. As the portfolio begins its second full year of operations and given greater momentum to develop and implement ESG disclosure frameworks, particularly in the EU for financial market participants, we believe that reporting in greater detail and on broader criteria for these considerations will serve USF and shareholders well.

USF is an owner of utility-scale solar assets, and accordingly, is inherently aligned with the transition to renewable energy. We are proud of USF's contribution toward reducing carbon emissions from the electricity sector. In its first full year of operations, USF's solar projects totaling 493 MW<sub>DC</sub> are estimated to displace 633,000 tons of CO<sub>2</sub><sup>1,2</sup> which is equivalent to powering over 79,000 US homes or removing over 137,000 US cars from the road every year.

However, we believe that the product of a business (in our case solar energy) alone cannot be the measure of its impact (positive or negative) on sustainability and on its various stakeholders. We must consider our responsibilities more broadly, for instance, the impact of our day-to-day operating activities on local land and the communities in which we operate and the strength of our governance and reporting to measure and improve that impact. In short, to the extent possible, we must look at the whole picture, to really know where we stand as a Company.

Today, ESG and sustainability considerations are both critical in risk management, as well as in identifying potential opportunities. In this report, we include some of the reporting frameworks we have shared before, like the UNSDGs that we report on bi-annually, and we also initiate reporting under the Sustainable Finance Disclosure Regulation, in the format prescribed in Annexe One of that EU directive, which has only recently been implemented for EU entities.

The importance of combatting climate change, ensuring that Companies are good corporate citizens, and of providing transparent, thorough company disclosure will only increase. As reporting frameworks evolve, we will evaluate how we can and should update USF's reporting. The USF Board, alongside the Investment Manager, is in a strong position to support this work given the experience of each of its four members, two women and two men, across investment trusts, the Financial Services Authority, banking and the energy and infrastructure sectors broadly, as well as, solar and renewables specifically, (both in the US and the UK). We will continue to leverage this experience to provide strong leadership and governance for USF.

Yours faithfully,

**GILLIAN NOTT**

*Non-Executive Chair*



1. Estimates use the first year of each plant's electricity production once operational or acquired by the Investment Manager.
2. US CO<sub>2</sub> emissions displacement is calculated using data from the US Environmental Protection Agency's "AVoided Emissions and geneRation Tool" (**AVERT**).



## 2. Letter From The CEO

As the new CEO of New Energy Solar Manager, the Investment Manager of US Solar Fund, I am pleased to present our Sustainability Report for 2021.

While we have seen significant disruption to global economies, supply chains and day-to-day interactions resulting from the pandemic, the pace of adoption of renewable energy has remained high. Importantly, investor demand for sustainable investments is also strong. According to Morningstar<sup>3</sup>, in the third quarter of 2021, global sustainable fund assets climbed to US\$3.9 trillion and ESG assets are on track to exceed US\$53 trillion globally by 2025, representing more than a third of the expected US\$140.5 trillion of global assets under management<sup>4</sup>. As demand for sustainable investment opportunities continues to grow, there is an increasing awareness of the need to implement more sustainable operating practices in business and to measure the impact of those practices for the benefit of investors and stakeholders.

### IMPROVING DISCLOSURE FOR SUSTAINABILITY

Over the course of this year, the parent of the Investment Manager has become a signatory to the UN Principles for Responsible Investing (UNPRI) and next year will see the mandatory adoption of new disclosure standards in the EU for financial market participants, the Sustainable Financial Disclosure Regulation (SFDR) and the implementation of the Taxonomy Regulation (the **Taxonomy**)<sup>5</sup>. The SFDR and the Taxonomy (together the **EU Regime**) will be followed by disclosure standards for EU-listed entities and the combination is intended to enable investors to understand the extent to which businesses are conducting their operations sustainably and, in turn, to make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. It is also expected that there will be a significant improvement in the information available on the impact of sustainability risks and a reduction in the incidence of unsubstantiated claims pertaining to environmental credentials, known as “greenwashing”.

While USF is not legally required to comply with the EU Regime, international investors, and particularly European investors, are seeking information from investee companies to fulfil their own ESG-related disclosure obligations. Accordingly, USF is establishing measures that will enable it to provide the comprehensive information required by the SFDR on a regular basis with a view to achieving consistency with the EU Regime.

USF was conceived and developed to generate electricity in a way that would eliminate greenhouse gas emissions and also reduce the impact of the power sector on the environment through the reduced use of water and lower waste. USF’s assets have a minimal impact on their surrounds, and we seek to manage the business in a way that upholds the values of the applicable human rights, anti-bribery, anti-corruption and anti-slavery legislation. While USF is externally managed and accordingly, does not

directly employ personnel, USF’s Investment Manager recognises the need to focus on diversity and employee wellbeing. For these reasons USF is well-placed to benefit from the increased attention to the ESG practices of enterprises.

### THE ENERGY TRANSITION IS PROGRESSING WELL IN THE UNITED STATES

Increasing acceptance of the role of renewables in power systems and the declining cost of batteries to improve the integration of renewables is driving continued strong growth in the development of solar in the US. Decarbonisation of the electricity grid by 2035 is a goal of the current federal administration and an increasing number of states, cities and utilities are committing to net-zero carbon-emissions goals. Corporate procurement is also driving strong demand for renewable energy.

Analysis undertaken by energy consultants ScottMadden<sup>6</sup> found that although the electricity sector was historically the largest source of carbon emissions in the US, emissions peaked in 2007 and have been trending downwards since. The reduction in emissions is the result of fossil fuel switching (switching from coal to natural gas) and the introduction of carbon-free generation. Currently, nuclear and hydro generation are the largest sources of carbon-free generation in the United States, but their input is relatively unchanged since 2005, whereas wind and solar are the two most significant sources of the growth in carbon-free generation. No significant coal capacity has been constructed since 2013.

Recent data from energy consultancy Wood Mackenzie<sup>7</sup> indicates that installations of utility-scale solar in the US in the third quarter of 2021 totalled 3.8 gigawatt (GW), the largest third quarter on record and despite rising equipment costs and supply chain uncertainties. Their forecast for installed capacity for 2021 is 20.3 GW, a significant increase over the 14.3 GW installed in 2020 in the US.

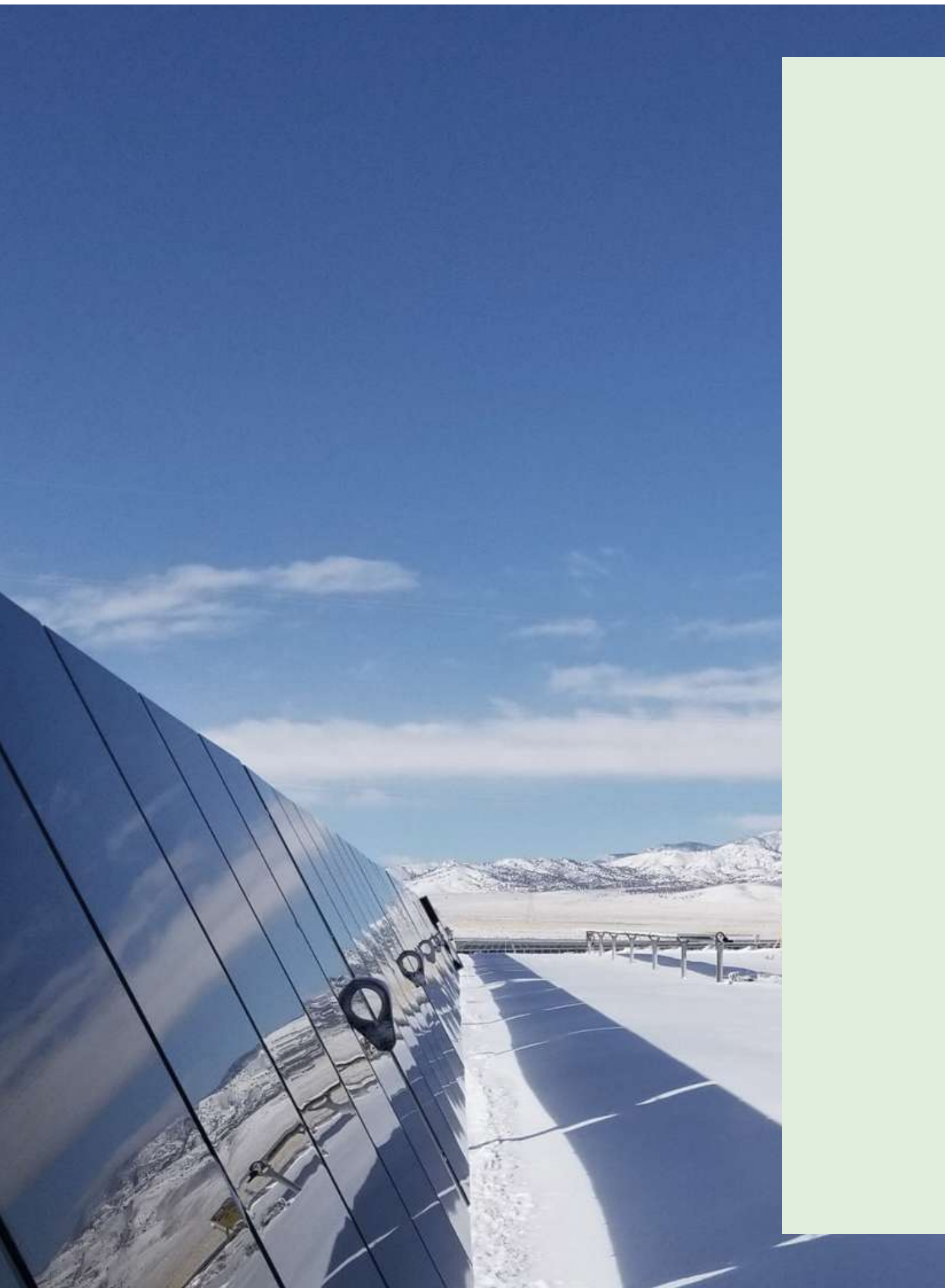
While the US has 76.7 GW of installed utility-scale solar, approximately 40% of this operating capacity is concentrated in California and Texas. However, a number of US states have over 2 GW of operating utility-scale solar including Virginia, North Carolina, Georgia, Florida, Arizona, Nevada and the District of Columbia. Of the capacity installed in the third quarter of 2021, Texas and Virginia installed the largest shares, together accounting for over 50% of total capacity installed<sup>8</sup>.

The market remains robust with voluntary procurement being the largest driver of demand. Utility-scale solar is, and is likely to remain, the most economically competitive electricity source in most US states. Corporate procurement, as a result of the adoption of ESG goals, is also an important driver along with, state and utility clean energy and emissions reduction goals. Currently, 28 states and the District of Columbia have active renewable or clean energy requirements and 248 utilities have announced clean energy or emissions reduction targets.<sup>9</sup>



3. Morningstar Direct.
4. ESG assets may hit \$53 trillion by 2025, a third of global AUM. Bloomberg Intelligence, February 23, 2021.
5. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020.
6. Power Decarbonisation: Past and Future, ScottMadden's Energy Practice, October 2021.
7. Wood Mackenzie/SEIA US Solar Market Insight: Q4 2021, December 2021.
8. US utility-scale solar market update: Q4 2021, Wood Mackenzie, Sylvia Leyva Martinez, Senior Analyst and Matthew Sahd, Research Associate.
9. US utility-scale solar market update: Q3 2021, Wood Mackenzie, Sylvia Leyva Martinez, Senior Analyst and Matthew Sahd, Research Associate.





The energy transition momentum appears to be solid in the United States, with 72% of the 114 GW of expected generation capacity retirements between 2021 and 2026 comprising coal-fired generation.<sup>10</sup> The current policy environment for additional federal government clean energy legislation is complex but moving forward.

The Bipartisan Infrastructure Bill passed congress on 6 November, 2021. The Democrats aim to include further clean energy policies in a second bill, the Build Back Better Act, which passed the House of Representatives on November 19, 2021. The bill is currently estimated to be \$1.7 trillion with \$555 billion dedicated toward clean energy and climate investments<sup>11</sup> including:

- **\$320 billion:** Clean energy tax incentives such as solar ITC/PTC's extensions and standalone battery tax credits;
- **\$110 billion:** Investments and incentives for clean energy technology, manufacturing and supply chains including solar panels and batteries;
- **\$105 billion:** Investments and incentives to address extreme weather and legacy pollution (Climate resilience); and
- **\$20 billion:** Incentives for the government to purchase "long-duration storage, small modular reactors and clean construction materials" (Clean energy procurement).

Despite the Build Back Better Act not receiving sufficient support from Senate Democrats in its current form, there is an expectation that it will be reshaped and that some of the key clean energy and climate initiatives will pass in a modified form.

### US SOLAR FUND LOOKS AHEAD

2021 was the first full year that USF's portfolio was fully operating, the Company commenced paying its full target dividend, and it completed its first capital raise since its 2019 IPO, exceeding its target with strong support from new and existing shareholders. We believe the Company is in a good position to capitalise on an exciting, growing solar market in the US. I look forward with great confidence and thank you for your support of the role of solar power in hastening the energy transition to a low-carbon future.

Yours faithfully,

**LIAM THOMAS**

*Chief Executive Officer*

10. Ibid.

11. <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/biden-releasing-new-build-back-better-plan-with-555b-for-climate-clean-energy-67321188>.



### 3. About US Solar Fund

#### OVERVIEW OF US SOLAR FUND

KEY FEATURES	SUMMARY
Investment Policy	US Solar Fund plc ( <b>USF</b> or the <b>Company</b> ) is listed on the premium segment of the London Stock Exchange and aims to provide investors with 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.
Objectives	The Company acquires or constructs, owns and operates solar power assets that are expected to have an asset life of at least 30 years and generate stable and uncorrelated cash flows by selling electricity to creditworthy offtakers under long-term power purchase agreements (or <b>PPAs</b> ).
Investment Manager	USF is managed by New Energy Solar Manager, which was established in 2015 and has committed a total of more than US\$1.3 billion to 57 utility-scale solar assets, 55 of which are in the US, totalling 1.2GW <sub>DC</sub> .
History of the Company	The Company's initial public offering ( <b>IPO</b> ) in April 2019 raised \$200 million; the funds were all committed or invested by December 2020 and the solar power assets were fully operational by that date. In May 2021 the Company raised an additional \$132 million as part of a 12-month Placing Programme. The majority of the proceeds have been used to repay debt, and the Company is exploring growth opportunities targeting increased dividend cover and NAV accretion.
Portfolio	USF's current portfolio consists of 42 projects across four US states with a combined capacity of 493 megawatts ( <b>MW<sub>DC</sub></b> ). Its assets are fully operational, generating over 700 gigawatt-hours ( <b>GWh</b> ) from 1 January 2021 to 30 September 2021. Power offtake agreements are in place for 100% of generation with creditworthy counterparties with an average remaining life of 14.4 <sup>12</sup> years, providing a resilient and uncorrelated income stream.
Target Return	USF aims to deliver an annual cash-covered dividend of 5.5 cents per share, growing at 1.5 to 2% per annum, for each financial year from and including 2021.

12. As of 31 December 2021.







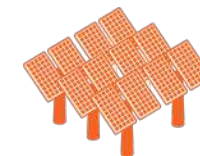
## KEY PORTFOLIO METRICS



**42**  
Solar power  
plants in the  
United States



**493 MW<sub>DC</sub>**  
Total portfolio  
capacity<sup>13</sup>



**>1.5 million**  
Solar panels  
generating emissions-  
free electricity



**14.6 years**  
Capacity weighted  
average PPA term<sup>14</sup>



**5.5 cents**  
Per ordinary share  
target distribution



**>700 GWh**  
Electricity produced  
year to date 2021<sup>14</sup>



**633,000**  
Tonnes of CO<sub>2</sub>  
displaced annually<sup>15, 16</sup>



**137,000**  
Equivalent US  
cars displaced<sup>15, 17</sup>



**79,000**  
US equivalent  
homes powered<sup>15, 18</sup>

<sup>13.</sup> Total portfolio of 493 MW<sub>DC</sub> includes plants that are wholly or partly owned by USF, equity-adjusted.

<sup>14.</sup> As at 30 September 2021.

<sup>15.</sup> Estimates use the first year of each plant's electricity production once operational or acquired by the Investment Manager.

<sup>16.</sup> US CO<sub>2</sub> emissions displacement is calculated using data from the US Environmental Protection Agency's "AVoided Emissions and geneRation Tool" (**AVERT**).

<sup>17.</sup> Calculated using data from the US Environmental Protection Agency.

<sup>18.</sup> Calculated using data from the US Energy Information Administration (principal agency of the US Federal Statistical System).

# 4. Sustainability Philosophy & Framework

## SUSTAINABILITY PHILOSOPHY

USF was established to both capitalise on and contribute to the world's increasing awareness of the impact of climate change and the need to better manage the world's resources for present and future generations. The Company is focused on sustainability, primarily as an investor in the solar industry, but also in the way the Company is managed.

## SUSTAINABILITY FRAMEWORK

### INTRODUCTION

US F's primary activity is investing in renewable energy plants that generate emissions-free power, contributing directly to the world's transition to a lower carbon economy. In addition to USF's patently sustainable character, the Company also seeks to conduct its business in a sustainable way, to ensure that its impact on the communities in which it operates is positive, that its partnerships promote the goals of the United Nations Sustainable Development Goal (**UNSDG**) framework, and that its stakeholders can measure its impact.

As an externally managed investment entity, USF has a company Board and no employees. USF's assets are managed by New Energy Solar Manager Pty Limited, the Investment Manager, which employs over 20 people. This high quality, experienced team is dedicated to managing two solar investment funds, New Energy Solar (ASX:NEW) and USF. We refer to the Investment Manager's personnel as USF's team in this Sustainability Report.

### GOVERNANCE

Developing, implementing, managing and reporting on USF's sustainability activities is undertaken by the Investment Manager, which reports to the Board on an ad hoc and quarterly basis.

The Company's policies, including those pertaining to sustainability, are reviewed and monitored on an ongoing basis as needed and formally on an annual basis. The USF Board comprises four independent directors each with different and complementary backgrounds and valuable industry and investment trust experience as well as demonstrated stewardship and governance excellence. The strength of USF's Board strongly supports USF's fundamental environmental credentials.

### REPORTING

While the UNSDG provides guidance for the way in which USF is operated and managed, the measurement of USF's contribution to these goals is through sustainability reporting. USF's sustainability reporting has been developed with reference to the Global Reporting Initiative (**GRI**) and the UNPRI to ensure its format is particularly suitable for one of USF's largest stakeholder groups, investors. This year the parent entity of the Investment Manager has become a PRI signatory and formal compliance with the PRI regime will be required by the Investment Manager with respect to USF's reporting.







## INFLUENCE OF INCOMING EU REPORTING REGIME

Reporting on sustainability impacts and measures to alleviate the adverse impacts of the operations of business on ESG factors is becoming increasingly topical and increasingly comprehensive. While a range of reporting formats has been or is being developed by various groups, for example the Sustainability Accounting Standards Board and the Task Force on Climate-Related Financial Disclosures, one of the most prescriptive and potentially influential reporting regimes is the European Union's SFDR. It forms part of the European Commission's Action Plan on Financing Sustainable Growth (2018) and, unlike other ESG reporting regimes, it has been implemented through legislation, coming into effect in the EU on 10 March 2021 for financial market participants.

The focus on the finance sector is based on an understanding that finance is a *"critical enabler of transformative improvements in existing industries in Europe and globally"*.<sup>19</sup> Meeting the EU's environmental objectives requires public sector, institutional and private capital resources to both expand the low-carbon, resilient economy and to transform existing activities to a more sustainable footing. The legislative tools, such as the SFDR, are designed to help plan and report the transition of economic activities to emissions-reduction and sustainable pathways.

Complementing the SFDR is the Taxonomy, an amendment to the SFDR, which, in essence, is a means of classifying activities to the extent that they contribute to environmental objectives. The Taxonomy provides a practical tool to assist the market to understand which activities are consistent with environmental objectives, and accordingly the extent to which any activity can be called sustainable, with economic activity considered Taxonomy aligned or sustainable if it:

- a) Substantially contributes to at least one of the environmental objectives as defined in the Taxonomy and its technical screening criteria (climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention control, and protection and restoration of biodiversity and ecosystems);
- b) Does no significant harm to any of the other European environmental policy objectives as defined in the Taxonomy and its technical screening criteria (climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention control, and protection and restoration of biodiversity and ecosystems); and
- c) Complies with minimum social safeguards, defined in reference to the UN Guiding Principles on Human Rights and the OECD Guidelines.

The EU Regime has been described as representing *"a generational shift for responsible investment"*.<sup>20</sup> It intends to make the sustainability profile of investment funds and products easier to understand, more comparable, and to avoid "greenwashing". Mandatory reporting for EU financial participants<sup>21</sup> will apply from 1 January 2022 with a similar regime expected to be extended to all European-listed entities (Non-Financial Reporting Directive<sup>22</sup>). While USF does not fall under the scope of the EU Regime, European-based investors are seeking information from investee companies, to fulfill their own reporting obligations, which has the practical effect of extending the scope of the EU Regime beyond Europe.

The potential reach of the EU Regime is acknowledged by the Technical Expert Group developing the EU Regime and some of the obligations required to fulfil the disclosure under the EU Regime are required irrespective of the location of the underlying economic activity.<sup>23</sup>

19. [Taxonomy: Final report of the Technical Expert Group on Sustainable Finance](#), March 2020.

20. [PRI Investor Briefing "EU Taxonomy"](#).

21. Defined term in Article 2(1) Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019.

22. [Directive 2014/95/EU](#) of the European Parliament and of the Council of 22 October 2014.

23. [Taxonomy: Final report of the Technical Expert Group on Sustainable Finance](#), March 2020.



APPLICATION TO USF

Although USF is not legally required to comply with the EU Regime, as a business that was founded to promote the transition to a low-carbon economy, the Company is well-placed to benefit from the structured sustainability reporting environment that that the EU Regime provides. Additionally, the mandatory nature of the EU Regime for European investors provides a strong rationale for companies with or seeking European shareholders to try to provide the degree of information on the nature of their economic activities, sustainable or otherwise, that best meets the requirements of investors.

Accordingly, USF is initiating reporting that is consistent with the framework of the EU Regime and some of its substantive requirements, with a view to implementing policies and processes that will enable the Company to meet the EU Regime standards over the course of the next 18-24 months. The information provided in this Sustainability Report is not required to be, and is not intended to be exhaustive. It represents the commencement of a process to achieve compliance over time and will evolve as reporting under the EU Regime becomes more widespread and standards and consistency of measurement tools and benchmarks improves.

ALIGNMENT WITH UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (UNSDG)

In 2015, the United Nations developed 17 Sustainable Development Goals to enable individuals, organisations, corporations and governments to implement, record and measure their approach to addressing global challenges including poverty, inequality, and climate change. The Company is aligned with the UNSDG and has selected two core goals to which the Company can most measurably contribute.



	7. AFFORDABLE AND CLEAN ENERGY	8. DECENT WORK AND ECONOMIC GROWTH
Relevant Target	By 2030, increase substantially the share of renewable energy in the global energy mix. (See UNSDG 7.2 on page 11)	Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment. (See UNSDG 8.8 on page 12)
Reporting	Measurement of carbon impact of Solar Assets; development of strategic plans for assets at end of life (e.g. solar panel recycling).	Reporting on health and safety strategic initiatives, planning and incidents at assets under ownership.

CONSISTENCY WITH UNPRI

The UN’s 2030 Agenda for Sustainable Development has at its core the SDGs and the EU determined that it would link the SDGs to its policy framework to ensure that all EU actions and policy initiatives, both within the EU and globally, would take account of the SDGs. The rationale for this commitment is a belief that the transition to a low-carbon, more sustainable, resource-efficient and circular economy in line with the SDGs is key to ensuring long-term competitiveness of the economy of the EU. The EU Regime represents the practical implementation of this commitment and seeks to make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development by requiring enterprises to assess on a continuous basis not only all relevant financial risks, but also all relevant sustainability risks that might have a material negative impact on the financial return of an investment or of investment advice.

There is an inherent consistency between the EU Regime and the aims of the UNPRI. An investor briefing from the PRI states that reporting under the EU Regime links to the PRI<sup>24</sup> and the frameworks have some similarities, although the EU Regime is focused on both the entity and product levels, while the PRI is at an entity level. The EU Regime is also more prescriptive, while the PRI asks more open-ended and broader questions about responsible investment overall.

24. [PRI Investor Briefing](#) “EU Regulation on Sustainability-Related Disclosures in the Financial Services Sector” Updated in April 2021.





## 5. ESG and Sustainability Reporting

### ENVIRONMENTAL, SOCIAL AND GOVERNANCE

The Company and Investment Manager acquire, construct and operate utility scale solar projects. In doing so, ESG factors are taken into account.

The Company invests in and sells energy generated by Solar Assets to energy offtakers, directly contributing to renewable energy infrastructure and renewable power generation. USF's portfolio comprises 42 operational solar plants which are responsible for displacing more than an estimated 633,000 tonnes<sup>25</sup> of CO<sub>2</sub> emissions, equivalent to powering over 79,000 US homes, or removing over 137,000 US cars from the road every year.

Core to the Company's investment and environmental objectives is the intention to build a long-term, sustainable business. Accordingly, the Directors and the Investment Manager are committed to managing USF in line with the core principles of good ESG practices.

### ESG PRINCIPLES AT WORK IN USF

Adherence to ESG principles requires USF to consider the broader impact of its activities and to incorporate practices to further the aim of these principles.

Below are a number of ways that USF engages with ESG considerations across all aspects of its business: from due diligence and acquisition of assets, to construction and operation of projects. Many of the efforts are applied across all projects, some as appropriate based on size, location or status (in construction or operating) of the project.

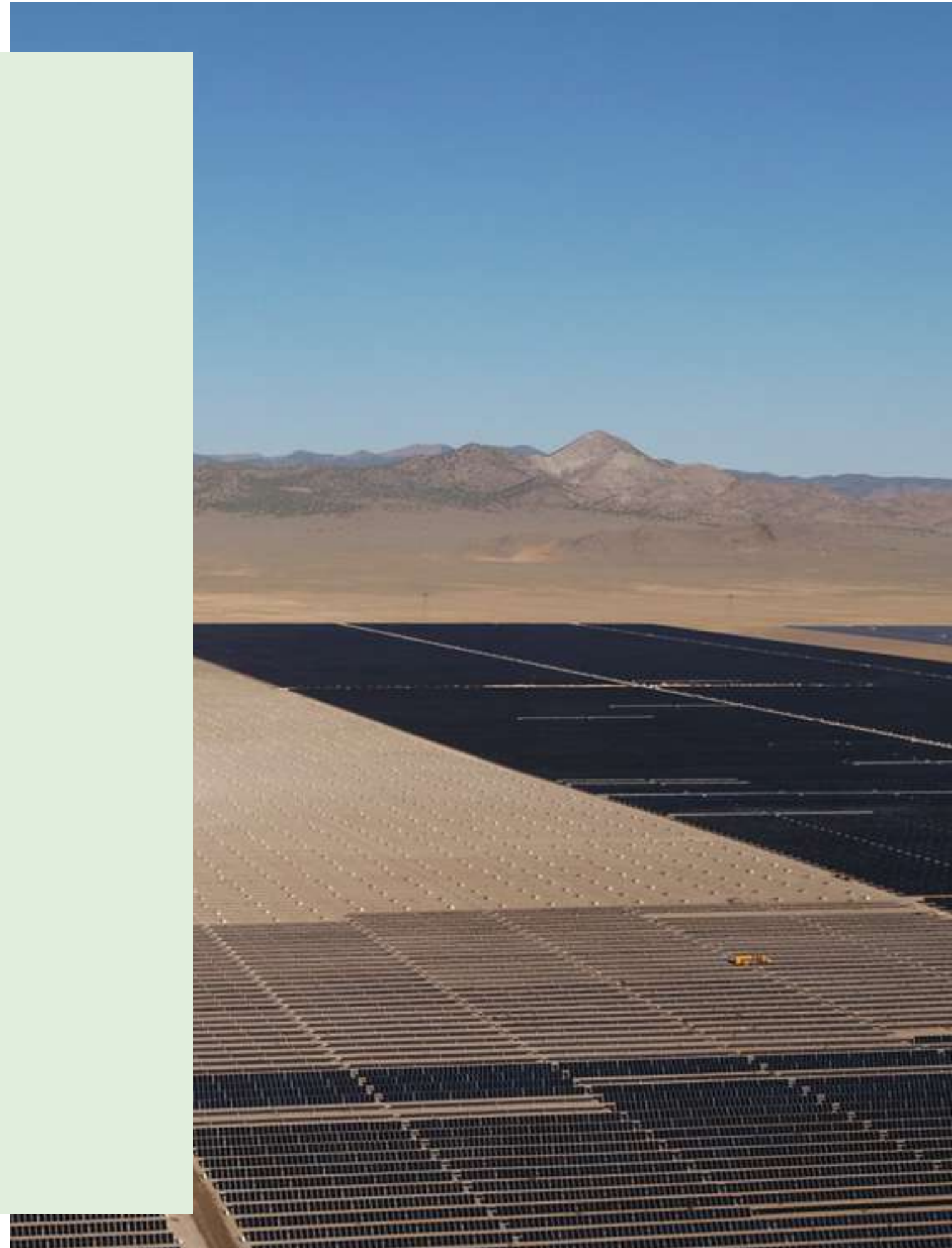
#### ENVIRONMENTAL

- Environmental site assessments are completed for all assets during due-diligence and obtain certification that all projects comply with applicable local, state or federal law.
- Physical climate-related risks are considered during the diligence process and routinely throughout operations.
- Site specific measures implemented during operations as appropriate:
  - Minimisation of water usage and monitoring consumption
  - Planting of local/indigenous grasses, plants or wildflowers
  - Implementation of sustainable drainage and flood control measures.

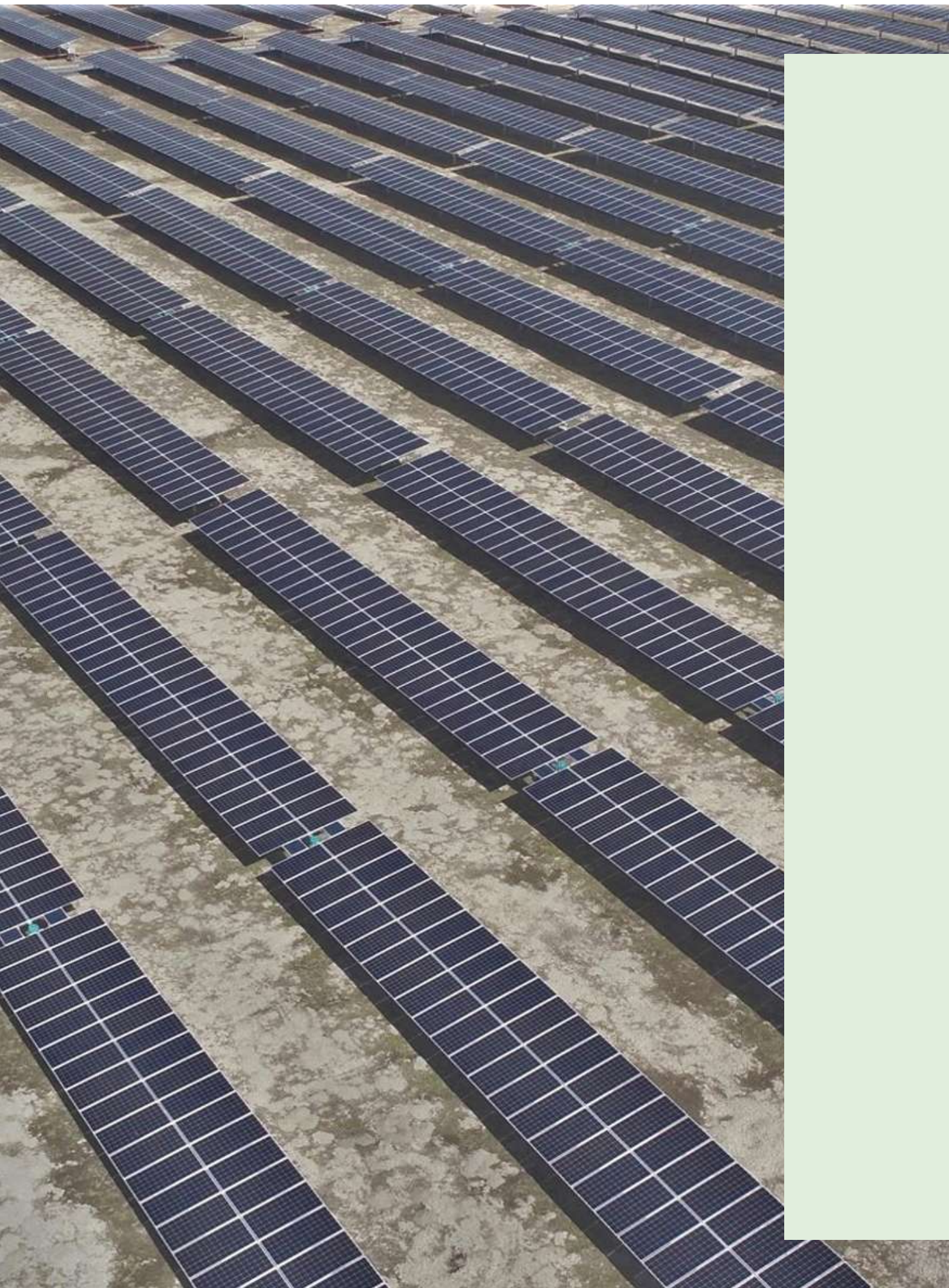
#### SOCIAL

- Prior to construction or investment, each solar asset site has, as part of the Engineering, Procurement, and Construction (EPC) contract, an agreed Health and Safety Plan that explicitly outlines health, safety and security measures to be employed and includes various state and federal laws to which all contractors, subcontractors, and site visitors must adhere, as well as injury reporting and investigation and corrective action processes.
- The Company will often acquire plants that are not yet operational, and as such require many contractors and employees to construct each project. For example there were over 80 contractors on site for the construction of the 128MW<sub>DC</sub> Milford solar plant. The Company, through the engagement of its contractors, seeks to create quality jobs in the communities in which it operates. Once operational, the plants provide a smaller number of long-term employment opportunities for members of the communities in which the plants are located.
- The Company is committed to making tangible contributions to the prosperity and economic development of the regions in which it operates. For example, the Company seeks to form open and strong relationships with the landowners on which its assets are located, as well as those near its assets. The Company also partners with educational and research institutions to share insights and data to further advance the solar industry.

25. Estimates use the first year of each project's electricity production once operational or acquired by the Investment Manager; and assume all projects under construction are fully operational.







- Site specific measures implemented during operations as appropriate:
  - Attendance at local community and government meetings to maintain community engagement and dialogue
  - Ongoing relationship development with Operation and Maintenance (**O&M**) providers, construction contractors, and landowners to encourage local community engagement and contribution
  - Effective complaint reporting and handling
  - Engagement with local education institutions to help develop understanding of renewable energy
  - Contributions to select local and regional charitable organisations
  - On site, all injuries and incidents must be reported immediately, and reporting is followed by a well-documented investigation process, detailed report, and corrective action.

#### GOVERNANCE

- O&M contractors and facility managers must obtain and maintain all permits required under applicable laws, including environmental regulations for each facility, and operate them accordingly.
- EPC contracts require third parties to conduct themselves and their processes to the highest standard of environmental control and compliance with all applicable laws. Strict controls are implemented to avoid any spill contamination, hazardous substances, trade sanctions in supply chains, and waste containment, among others.
- The Investment Manager ensures:
  - Periodic and regular review of safety statistics and site visits with site service providers to ensure compliance with local and regional laws and the Investment Manager's ESG practices
  - Annual review of contract compliance (including health and safety plans) with site service providers
  - Regular review of site permits and obligations to ensure safe and effective operations within the regulatory guidelines.
- The Board has worked with the Investment Manager and Company Secretary to maintain a framework of governance to meet the interests of stakeholders including shareholders, customers, financiers, government, suppliers and the community. The Company also considers acquisition and asset management principles and practices as they relate to dealing with anti-corruption and labour standards. The following are a list of policies adopted by the Company:
  - Code of conduct
  - Share dealing code
  - Bribery prevention policy
  - Whistleblowing policy
  - Health & safety policy
  - Environment and sustainability policy
  - Communication policy [including procedures for the release of price sensitive information]
  - Corporate social responsibility policy
  - Diversity policy
  - Dividend policy
  - Valuation policy
  - Risk management policy
  - Capital management framework.

The USF Board recognises that these governance considerations are critical to building a successful, long-term business.



**UN SUSTAINABLE DEVELOPMENT GOALS SUPPORTED BY USF'S BUSINESS PRACTICES**



In 2015, the United Nations created a blueprint to addressing global challenges including poverty, inequality, and climate change, with the 17 Sustainable Development Goals (SDG). Each goal has specific targets to be achieved with a 15-year timeframe (by 2030).

USF has identified 2 United Nations SDGs that it can best contribute to.



UNSDG 7.2



The 42 solar power projects in USF's portfolio have a combined capacity of 493MW<sub>DC</sub>. This power is generated without producing emissions and importantly, also replaces fossil-fuel generated power, thereby displacing CO<sub>2</sub> emissions. As USF's 42 assets are all operating, they are responsible for displacing the equivalent of 633,000 tonnes<sup>26</sup> of CO<sub>2</sub>, every year, equivalent to powering 79,000 US homes or removing 137,000 US cars from the road each year.

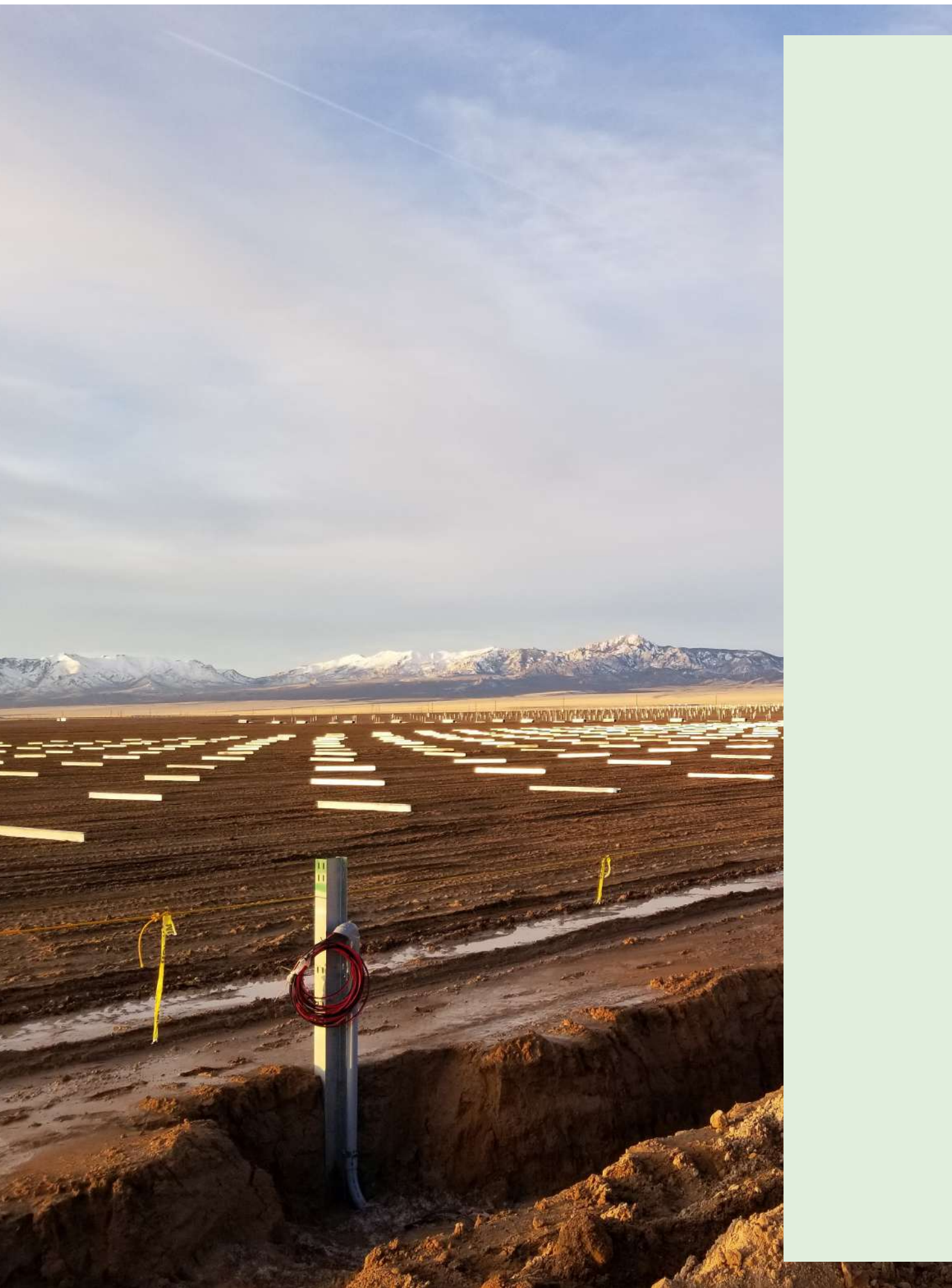
As a sustainably run business, USF is conscious of its obligations to carefully consider and plan for the future disposal of solar panels. Given USF's solar plants are relatively new, with only 8% of capacity (including all acquisitions) being operational for greater than five years and the majority being operational between two and five years, the business has not yet needed to manage the disposal of large quantities of solar panels, due to a typical solar asset life of 35 or more years per project. In any case, USF works with its contractors to ensure that materials and panels are disposed of or where appropriate recycled properly according to any associated regulations.

During construction and operation, the solar panels employed in USF's plants have proven to be robust and rates of damage and waste have been very low. After damage or replacement, USF intends to recycle as many panels as possible. Together with WeRecycle, a specialist recycling company, the Investment Manager has recently successfully recycled 36,000 panels damaged by fire at a California plant (owned by another fund managed by the Investment Manager). WeRecycle attempts to repair and resell modules at discounted prices and those it cannot cost-effectively repair, it processes to scrap commodities. The program aims to recover up to 99% of the raw commodities by weight; the solar panels are dismantled, severed and shredded, undergo secondary chemical processing, and have their raw materials returned to the global commodities market.

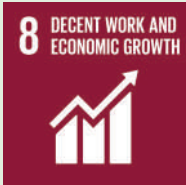
26. Estimates use the first year of each project's electricity production once operational or acquired by the Investment Manager; and assume all projects under construction are fully operational.







UNSDG 8.8



When an acquired project is yet to be constructed, an EPC Agreement must be agreed upon and signed before construction. This agreement contains a comprehensive and systematic Health and Safety Plan that explicitly outlines certain requirements according to each site location and layout of the project. This plan incorporates health, safety and security measures required by various state and federal laws to which all contractors, subcontractors and site visitors must adhere.

A site Health and Safety Committee is established for each project location, comprised of field representatives and management from the EPC contractor once construction commences. These representatives must obtain appropriate construction safety certification (known as “OSHA36”) and are responsible for daily safety briefings. The representatives also facilitate weekly “toolbox” meetings, designed to address potential safety concerns on-site, and ensure the implementation of preventive safety measures. USF did not have any assets under construction during the period.

Once a site is operational, and upon appointment of O&M contractors, a Safety and Health Management Plan is implemented. These plans provide personnel working at the site with a framework for addressing safety and health in the workplace with the goal of preventing any fatalities, injuries, illnesses and equipment damage. The approach is based on the principle that nearly all worksite fatalities, injuries and illnesses are preventable. USF currently has 42 operating projects.

The Company and the Investment Manager are also focused on injury reporting and investigation as they allow for review of existing preventive measures, thereby reducing the likelihood of an event occurring. All injuries and incidents must be reported immediately on the project site, followed by an investigation process, detailed report and corrective action.

For the nine months to 30 September 2021, there were no recordable injuries or lost-time accident on any of USF’s sites.

The Company and Investment Manager continue to monitor and maintain health and safety management policies and take a preventive and proactive approach when dealing with health and safety hazards, rigorously implementing safety practices and improving them where applicable.

The issue of alleged forced labour camps populated with Chinese Uighurs for crystalline polysilicon manufacturing is an emerging one, and Xinjiang province in China produces nearly half the world’s polysilicon supply. A review of the solar panels employed in the USF business has been undertaken and no plant constructed by USF or the Investment Manager uses Chinese-manufactured panels. Additionally, approximately 80% of the capacity constructed under USF’s ownership uses non-polysilicon technology. The capacity constructed before USF’s ownership was acquired during 2019 and 2020. USF was not aware of polysilicon raw material sourcing issues at the time of acquisition.

For future acquisitions, the Investment Manager intends to use the solar supply chain traceability protocol developed by the Solar Energy Industries Association; in addition to existing supplier and manufacturer due diligence.



DISCLOSURE UNDER SFDR IN PRESCRIBED ANNEXE ONE FORMAT

FINANCIAL MARKET PARTICIPANT: US SOLAR FUND (LSE:USF) LEGAL ENTITY IDENTIFIER: 2138007BIUWE7AHS5Y90, ISIN: GB00BJCWFX49

SUMMARY

US Solar Fund considers principal adverse impacts of its investment decisions on sustainability factors. The present statement is the consolidated principal adverse sustainability impacts statement of US Solar Fund and covers the reference period from 1 January 2021 to 31 December 2021.

DESCRIPTION OF PRINCIPAL ADVERSE SUSTAINABILITY IMPACTS (INFORMATION REFERRED TO IN ARTICLE 6 SFDR)				
ADVERSE SUSTAINABILITY INDICATOR	METRIC	IMPACT	EXPLANATION	ACTIONS TAKEN
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS				
GHG Emissions	1. GHG emissions	Scope 1 GHG emissions	Nil	Operating solar power plants do not emit greenhouse gases or any gaseous by-product.
		Scope 2 GHG emissions	Nil	See above.
		Scope 3 GHG emissions (from Jan 2023)	Nil	See above.
		Total GHG emissions	Nil	
	2. Carbon footprint	Carbon footprint	<b>Solar Power Plants</b> The carbon footprint of the solar power plants has been calculated using estimates from the US National Renewable Energy Laboratory (NREL) published in a 2012 study showing the carbon footprint of solar power plants to be equivalent to approximately 40g CO2 eq/kWh assuming a 30-year life. The study estimates cover the full life cycle of solar power plants from raw minerals extraction to operation and maintenance and decommissioning and disposal. This estimate represents an average across different technologies, crystalline silicon modules and thin film modules, and across different regions. NREL advises that the solar irradiation assumption had the greatest impact on variability of GHG emissions. For example, increasing irradiation to reflect conditions in the Southwestern US, where USF's Mount Signal 2 plant is located, would result in lower GHG emissions.  A later study published in December 2017 in the science journal Nature estimated that the lifecycle emissions for solar and wind were in the range of 3.5 – 12g CO2 eq/kWh. In a typical year, USF's portfolio of 42 solar power plants are anticipated to generate approximately 9,000 GWh of electricity. The table below also includes the CO2 equivalent carbon footprint according to each of the above reference points.	







ADVERSE SUSTAINABILITY INDICATOR	METRIC	IMPACT	EXPLANATION	ACTIONS TAKEN			
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS (CONTINUED)							
GHG Emissions (continued)	2. Carbon footprint (continued)	CO2 eq/kWH (tonnes)	Solar Power Plant Portfolio	Generation <sup>27</sup> (GWh)	NREL (2012) Carbon 49g CO2 eq/kWH (tonnes)	Nature (2017) Carbon 3.5 CO2 eq/kWH (tonnes)	Nature (2017) Carbon 12 CO2 eq/kWH (tonnes)
			North Carolina	253.0	10,118.1	885.3	3,035.4
			Oregon	247.5	9,901.1	866.4	2,970.3
			California	130.3	5,212.4	456.1	1,563.7
			Utah	277.5	11,101.5	971.4	3,330.5
			Total	908.3	36,333.1	3,179.1	10,899.9
			These are estimates based on the 2012 and 2017 studies referenced above as USF has not yet developed its own approach to measuring the carbon footprint of its investing in, constructing and operating solar projects. The Company is evaluating how best to measure this going forward.				
	<b>Investment Management</b> The Investment Manager maintains two offices for its operations, one in the US and one in Australia and in pre-COVID times executives regularly travelled within the US to visit asset sites and senior executives travelled between the US and Australia. The last 18 months during which COVID-19 travel restrictions were in place has meant that minimal travel has occurred. Similarly, the offices in both the US and in Australia have not accommodated staff or operated as usual. Investment Management staff have largely worked from home. Also prior to the pandemic, the Investment Manager regularly travelled to the UK to meet with shareholders and the Board of the Company. For all flights, carbon offsetting measures were used. USF has estimated the carbon footprint from its corporate activity previously and arrived at an estimate of 58 tonnes per annum. The Investment Manager uses carbon offsetting measures for all flights. Approximately 47 tonnes of the total 58 tonnes are attributed to flights and have been offset. It is estimated that COVID conditions should be reflected in a 60% discount on the business-as-usual scenario, implying 23 tonnes of CO2 for 2021. Excluding flights that have been offset, this would be approximately 4 tonnes of CO2 for 2021. These emissions have also been offset.						
	3. GHG intensity of investee companies	GHG intensity of investee companies.	Investee companies covered in the above GHG responses.	USF's assets are held in a US holding company which is a 100% owned subsidiary.			
	4. Exposure to companies active in the fossil fuel sector	Share of investments in companies active in the fossil fuel sector.	Nil				
5. Share of non-renewable energy consumption and production	Share of non-renewable energy consumption and production from non-renewable energy sources compared to renewable energy sources expressed as a percentage.	In terms of energy consumption, USF's Australian office is located in New South Wales, Australia where coal comprised 81% of the fuel mix of the state's generation output over the last 12 months. <sup>28</sup> USF's US office is located in New York where natural gas (37%), nuclear (33%) and hydroelectricity (22%) are the most significant fuel types in the state's generation of electricity. <sup>29</sup>					

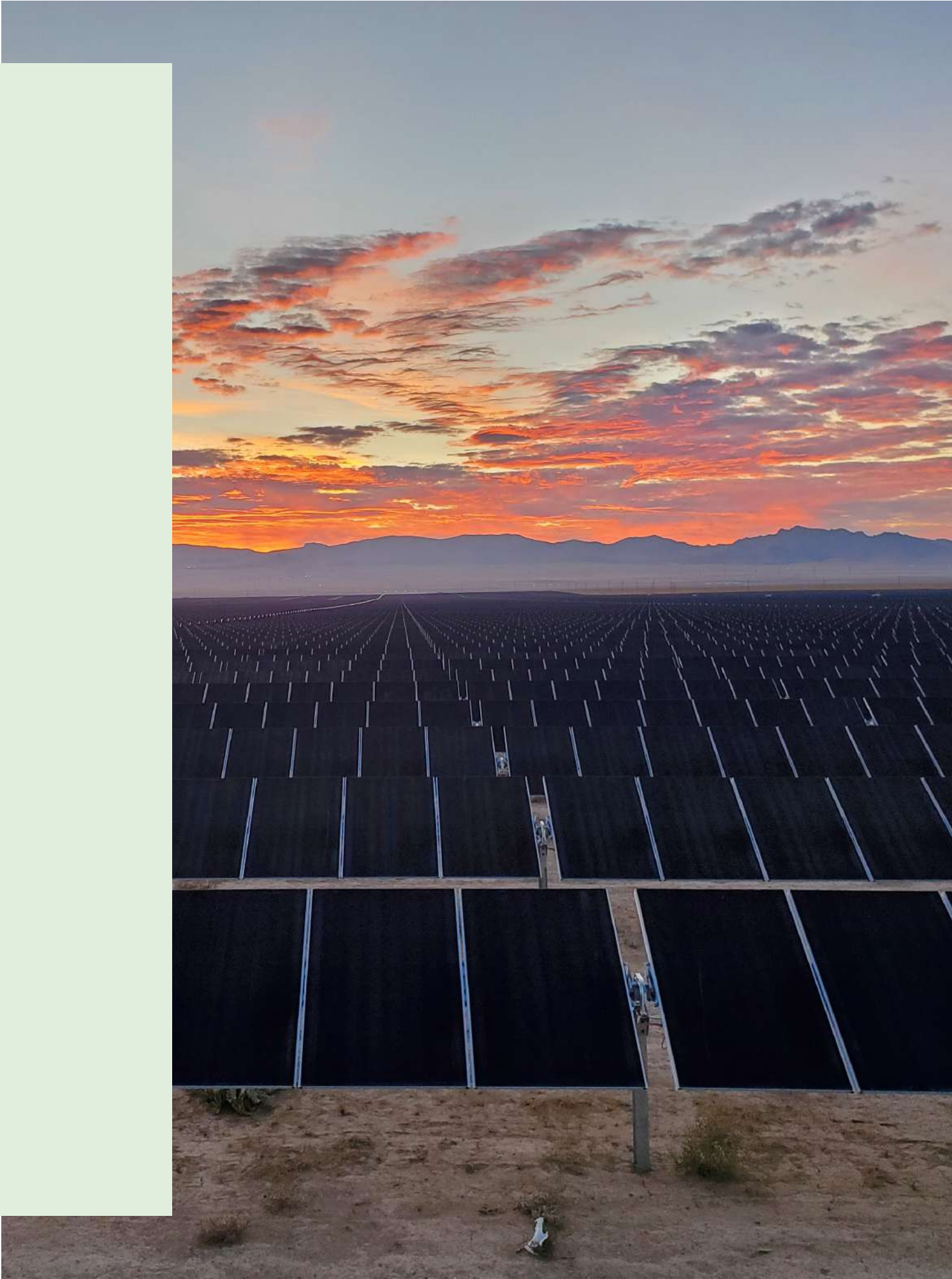
27. Environmental estimates use the first year of each project's electricity production once operational or acquired by the Investment Manager.

28. AEMO market data available – <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/data-nem/data-dashboard-nem>

29. New York Times data “How does your state make electricity?” by Nadja Popovich and Brad Plumer, 28 October 2020 – <https://www.nytimes.com/interactive/2020/10/28/climate/how-electricity-generation-changed-in-your-state-election.html>



ADVERSE SUSTAINABILITY INDICATOR	METRIC	IMPACT	EXPLANATION	ACTIONS TAKEN
CLIMATE AND OTHER ENVIRONMENT-RELATED INDICATORS (CONTINUED)				
GHG Emissions (continued)	6. Energy consumption intensity per high impact climate sector	In GWh per million EUR of revenue, per high impact climate sector.	The solar power plants consume a negligible amount of energy in their own right.	USF is only active in the electricity sector and its energy consumption from activity to manage its solar power plants is not material.
Biodiversity	7. Activities negatively affecting biodiversity-sensitive areas	Instances where activities of underlying operations are located in or near biodiversity-sensitive areas and activity negatively affects those areas.	N/A	In the siting of solar power plants, USF has ensured that all environmental regulations have been observed. Once solar power plants are established, vegetation around and throughout the plants is maintained to reduce the risk of fire but native flora and fauna is not prevented from flourishing on the sites.
Water	8. Emissions to water	Tonnes of emissions to water	N/A	USF does not discharge waste, hazardous or otherwise, into water sources.
Waste	9. Hazardous waste ratio	Tonnes of hazardous waste generated	N/A	N/A





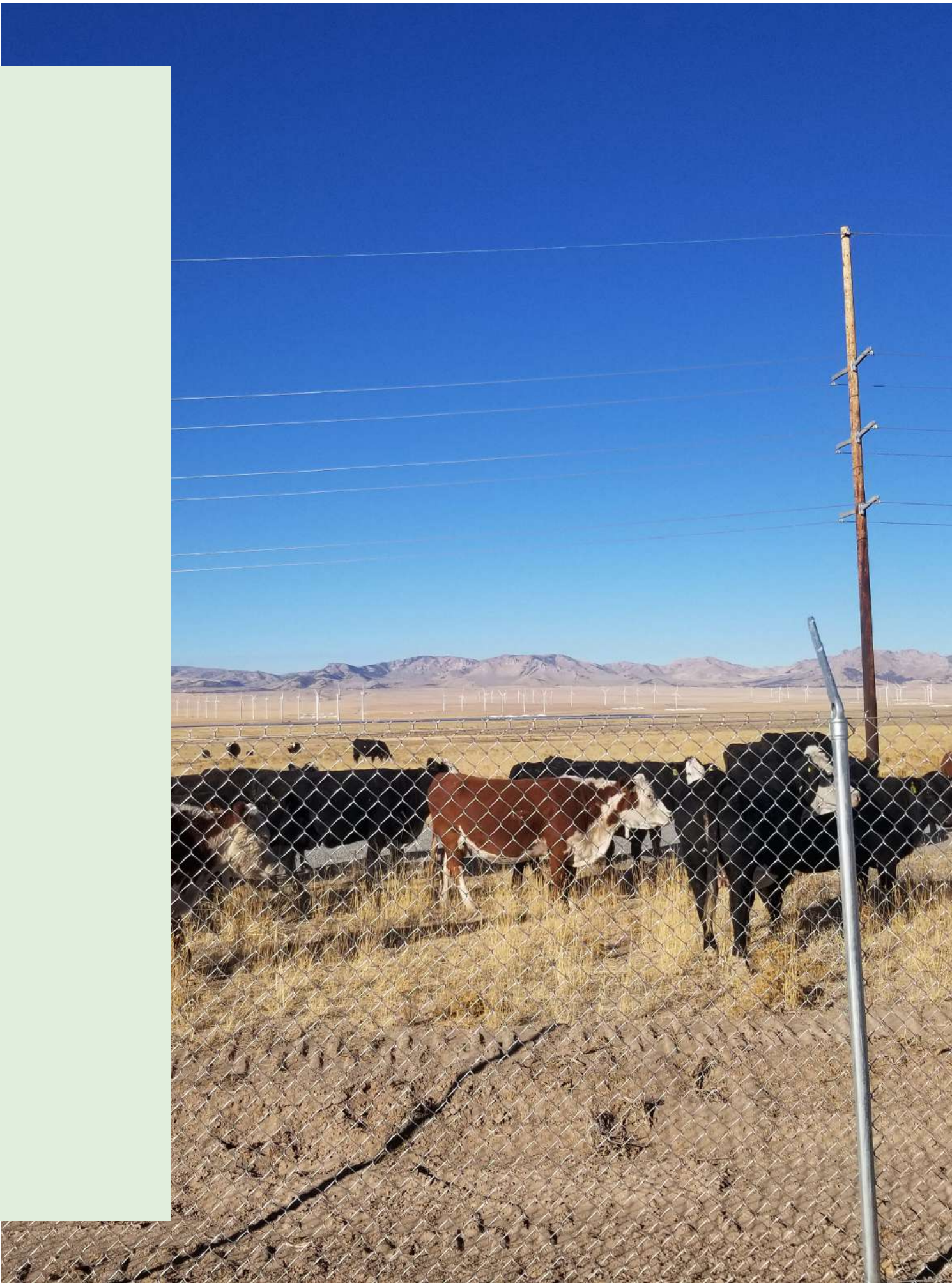


ADVERSE SUSTAINABILITY INDICATOR	METRIC	IMPACT	EXPLANATION	ACTIONS TAKEN
SOCIAL AND EMPLOYEE, RESPECT FOR HUMAN RIGHTS, ANTI-CORRUPTION AND ANTI-BRIBERY MATTERS				
Social and employee matters	10. Violations of UN Global Compact principles and OECD Guidelines for Multinational Enterprises	10 principles covering human rights, labour practices, environment and anti-corruption and OECD similar but more comprehensive and include consumer interests, taxation, competition, science and technology.	USF is not aware of instances that would constitute specific violations.	<p>In 2021, media reports<sup>30</sup> detailed alleged instances of forced labour camps populated by Chinese Uighurs involved in the manufacture of Chinese crystalline polysilicon module solar power panels.</p> <p>The issue of supply chain sustainability for polysilicon is an emerging one, and Xinjiang produces nearly half the world's polysilicon supply. It is very difficult to get full visibility on the complete supply chain. There is currently no reliable means of tracing raw materials and disclosure by panel manufacturers has been very limited.</p> <p>A review of the solar panels employed in the USF business was conducted to ascertain exposure to alleged Chinese forced labour in solar panel manufacturing.</p> <p>No plant constructed by USF or the Investment Manager uses Chinese-manufactured panels and ~80% of that volume by MW is non-polysilicon technology.</p> <p>The capacity constructed before USF's ownership was acquired during 2019 and 2020. USF was not aware of polysilicon raw material sourcing issues at the time of acquisition.</p>
	11. Lack of processes and compliance mechanisms to monitor compliance with the above	USF has processes for monitoring its practices with respect to employee and social matters and is intent on developing more comprehensive policies and procedures to better uphold human rights and to monitor and ensure compliance with anti-corruption and anti-bribery regulations.		<p>The parent of the Investment Manager has adopted a Modern Slavery Statement and is implementing practices and processes, including the Supplier Code of Conduct which covers modern slavery, to improve due diligence in relation to procurement.</p> <p>USF is a member of the US Solar Energy Industry Association (<b>SEIA</b>) and supports its initiative to require manufacturers to comply with a protocol to trace the provenance of products through the whole supply chain. See <a href="https://www.seia.org/research-resources/solar-supply-chain-traceability-protocol">https://www.seia.org/research-resources/solar-supply-chain-traceability-protocol</a>.</p>

30. "China uses Uyghur forced labour to make solar panels, says report" [BBC News](#) 14 May 2021; "Chinese Solar Companies Ted to Use of Forced Labour" New York Times, 28 January 2021



ADVERSE SUSTAINABILITY INDICATOR		METRIC	IMPACT	EXPLANATION	ACTIONS TAKEN
Social and employee matters (continued)	12. Unadjusted gender pay gap	Average pay gap.	USF has no employees and USF's directors receive the same compensation regardless of gender.		
	13. Board gender diversity	Ratio of male to female board members.	USF's Board comprises two female and two male directors, a ratio of 1:1.		
	14. Exposure to controversial weapons		Nil		
OTHER INDICATORS FOR PRINCIPAL ADVERSE IMPACT					
Indicator from Table 2 – water usage	<p>The solar panels of USF's 42 solar plants are washed on an as needed basis by contractors employed to operate and maintain the solar power plants (O&amp;M providers). Water is also used to maintain trees and shrubs on USF properties, as required by local ordinances and planning regulations to protect native flora (and fauna).</p> <p>Across the industry, O&amp;M providers are focused on minimising water usage, often through technology. For instance, NovaSource who provides O&amp;M services to MS2 and Milford, which comprise almost 50% of USF's portfolio, has a robotic system for cleaning that uses 75% less water than manual cleaning.</p> <p>For both panel cleaning and vegetation management, water is used sparingly and only when necessary. As a result, overall water usage is quite low. The total water usage for USF during 1H 2021 was 15,682 cubic feet (444 cubic meters). For comparison, according to the EPA, the average household uses 14,639 cubic feet a year. Of the water used, 12,173 cubic feet (340 cubic meters) was for vegetation management (maintaining vegetation based on local ordinances) and the remainder, for panel washing.</p>				
Indicator from Table 3 – anti-corruption and anti-bribery	<p>USF is an enterprise operating in the United States and listed in the United Kingdom on the London Stock Exchange. With respect to its solar power plant operations, these are regulated largely by the laws of the US states in which the assets are located. USF is not aware of specific instances where these operations are in contravention of laws or regulations prohibiting corruption and bribery.</p> <p>With respect to the conduct and compliance of the listed entity USF, USF is subject to the laws and regulation governing listed entities in United Kingdom, including disclosure and reporting requirements. USF is not aware of specific instances where its corporate operations are in contravention of laws or regulations prohibiting corruption and bribery.</p>				
Description of the policies on the assessment process to identify and prioritise PAI on sustainability factors and of how those policies are maintained and applied.					
USF is in the process of implementing policies and practices to achieve voluntary compliance with the EU Regime. Development and publication of policies prescribing the means of compliance are in train.					
Shareholder engagement strategy – NA. USF fully owns or has a controlling interest (at least 50%) in all projects in the portfolio.					
References to international standards – The parent entity of USF's Investment Manager is a signatory to the UNPRI.					





## 6. About This Report

**Report Scope:** US Solar Fund's Sustainability Report describes its work in the following key areas:

- Energy and climate change
- Community engagement
- Industry innovation and development
- Health and safety of people and communities
- Corporate governance and fiduciary duty to stakeholders

This report is prepared with reference to the GRI, the PRI and the EU Regime, internationally recognised reporting guidelines.

**Boundaries:** This Sustainability Report covers USF's Board domiciled predominantly in the UK, its operations in the US and its executive office in Australia.

**Reporting Year:** USF has reported data relating to the 2021 year unless otherwise noted. In some cases, data and information may include programs and activities underway or introduced in the period since 30 June 2020, as indicated.

**Currency:** All references to currency are in US dollars, unless otherwise indicated.

**Reporting History:** This is US Solar Fund's first annual Sustainability Report.

**Contact:** Please direct questions on this Sustainability Report or topics related to USF's corporate responsibility disclosures to [info@ussolarfund.co.uk](mailto:info@ussolarfund.co.uk).





## 7. Annex

### INDUSTRY BACKGROUND

#### IMPROVING MOMENTUM FOR THE ENERGY TRANSITION

There is no doubt that awareness of the potentially catastrophic effects of climate change is increasing. In 2021 the sixth assessment report (**AR6**) of the Intergovernmental Panel on Climate Change (**IPCC**) was released and it unequivocally stated that human influence has warmed the atmosphere, ocean and land and that warming observed in the period 1850 to 2020 is unprecedented in more than 2000 years.<sup>31</sup> Conviction on these issues has strengthened considerably in the seven years since the release of the previous report (**AR5**). The conclusions of the report and the outputs of the modelling undertaken by the IPCC were confronting. The panel warns that global warming of 1.5 and 2 degrees Celsius will be exceeded during this century, as early as 2040, unless deep reductions in CO<sub>2</sub> and other greenhouse gas emissions occur in the coming decades. As a result of such warming, AR6 indicates that changes in the climate system will become proportionally larger, such as frequency and intensity of hot extremes, marine heatwaves and heavy precipitation, agricultural and ecological droughts, intensity of tropical cyclones, as well as reductions in Arctic sea, snow cover and permafrost. Some of these changes, particularly in the ocean, ice sheets and global sea levels, will be irreversible.

While the conclusions of the report were not new, the release of AR6 coincided with the advent of devastating bushfires and record temperatures across the northern hemisphere. Also, the tone of AR6 was quite different to previous communications. Previously, IPCC scientists have been very measured and gone to great lengths to not overstate the circumstances and implications of climate change. AR6, however, betrays an IPCC that is clearly alarmed at what the science is indicating. The UN Secretary-General characterised this report as “a code red for humanity<sup>32</sup>”. Accordingly, media and public interest was heightened and leaders across the globe appeared to grasp the need to focus on preventing climate change from worsening and figuring out how to adapt to the changes we can no longer prevent. Thankfully, there appears to be widespread acceptance that climate change is no longer a question of physical science.

#### SUSTAINABLE INVESTMENT DEMAND

The strong demand for sustainable investment shows in the amount of capital flowing into ESG focused investments. Globally, sustainable investments reached a record \$2.3 trillion in Q2 2021 driven by an increase in sustainable investment products, market appreciation and new capital inflows. Europe drove most of the growth with \$112.4 billion net inflows during the quarter. In the US, the second quarter of 2021 saw roughly \$17.5 billion in net inflows to sustainable investments. While this is lower than the all-time high set in Q1 2021 of \$21.5 billion, it is still higher than Q2 2020.<sup>33</sup> As demand for more renewables continues to drive the energy transition, support for sustainable investments looks to be meeting the need for capital to fund new projects. With the increase in capital in the sector and as sustainable investing matures, disclosure for investors is also evolving to become more comprehensive.

#### THE OUTLOOK FOR RENEWABLES

Electricity generation accounts for approximately 25% of greenhouse gas emissions in the United States<sup>34</sup>. Emissions are released during the combustion of fossil fuels, such as coal, oil and natural gas, to produce electricity. In 2019, coal accounted for approximately 61% of CO<sub>2</sub> emissions from the sector, although it only represented 24% of the electricity generated in the US. The current US federal administration has a goal to achieve 100% clean electricity by 2035<sup>35</sup> and replacing coal-fired generation will be a key element in cutting emissions.

31. [IPCC Climate Change 2021, The Physical Science Basis, Summary for Policymakers](#), 7 August 2021

32. [UN Press Release "Secretary-General Calls Latest IPCC Climate Report 'Code Red for Humanity', Stressing 'Irrefutable' Evidence of Human Influence"](#), 9 August 2021

33. Morningstar Direct. Data as of 30 June 2021. (<https://www.morningstar.com/articles/1048918/us-sustainable-fund-assets-reach-a-new-milestone-in-2021s-second-quarter>)

34. US EPA data "[Sources of Greenhouse Gas Emissions](#)"

35. [White House Fact Sheet](#), April 22, 2021.





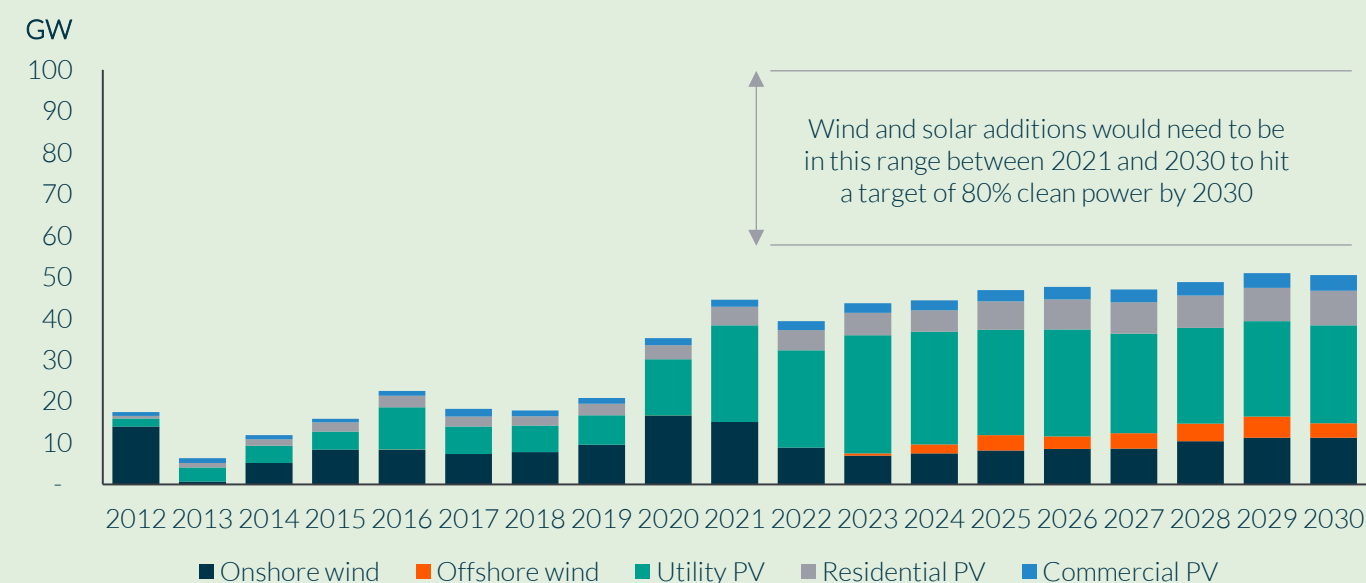
The outlook for renewables is very positive and Bloomberg New Energy Finance (**BNEF**) forecasts strong growth in renewables, assuming current policy settings.

Under current policy settings, the largest growth is anticipated in utility-scale solar, with forecasts of in excess of 22 GW added each year over the next five years. Onshore wind installations will also be significant with over 16 GW, similar to last year, anticipated to be completed before the end of 2021. BNEF expects onshore wind build to fall over the near-term from these high levels as the production tax credit scheme phases out (under current policy) and congestion in windy markets makes new projects less attractive.

In contrast, offshore wind is set to boom from 2024 given improved permitting and development processes and more states setting offshore wind capacity targets. Forecasts detail a cumulative capacity of 50 GW by 2035.

The US federal administration's infrastructure plan contains provisions to "potentially turbo-charge<sup>36</sup>" the pace of decarbonisation in the U.S. power sector. The stimulus contained in the infrastructure and associated bills would reform and extend the tax credit system for renewables and provide incentives for utilities to gradually increase the share of clean energy in their generation mix each year. Though it has met some resistance in late 2021, if passed, the stimulus is expected to bridge the gap between the current rate of growth of renewables in the US and the rate required to decarbonise the electricity sector by 2035.

**Figure 1: Projected Annual U.S. Wind and Solar Capacity Additions**

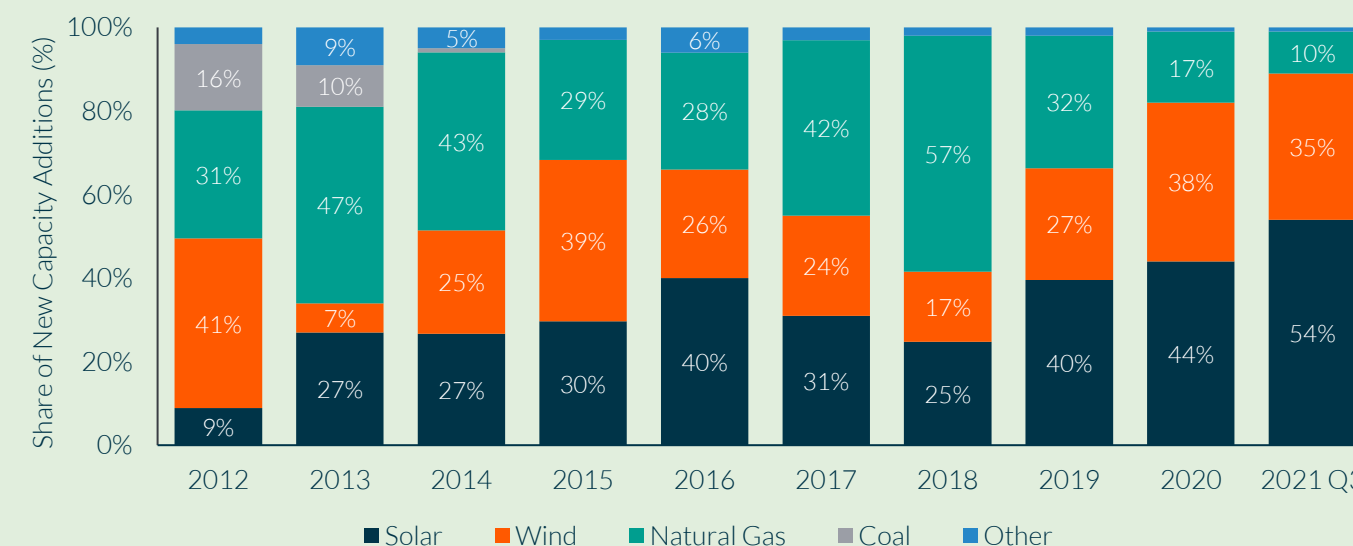


Source: BloombergNEF  
Note: Range of capacity additions is an indicative estimate.

## SOLAR PV INSTALLATION IN 2021

Over the course of Q3 2021, 5.4 GW of solar capacity was installed, 3.8 GW of which came from utility-scale solar installations. Approximately 7.5 GW of utility-scale solar is expected to come online in Q4 2021, bringing the total 2021 forecast to be 20.2 GW up 30% from 2020's 14.3 GW of installations. Solar PV accounted for 54% of all new electricity generating capacity additions between Q1 2021 to Q3 2021, continuing to be the largest share of generating capacity in the US<sup>37</sup>.

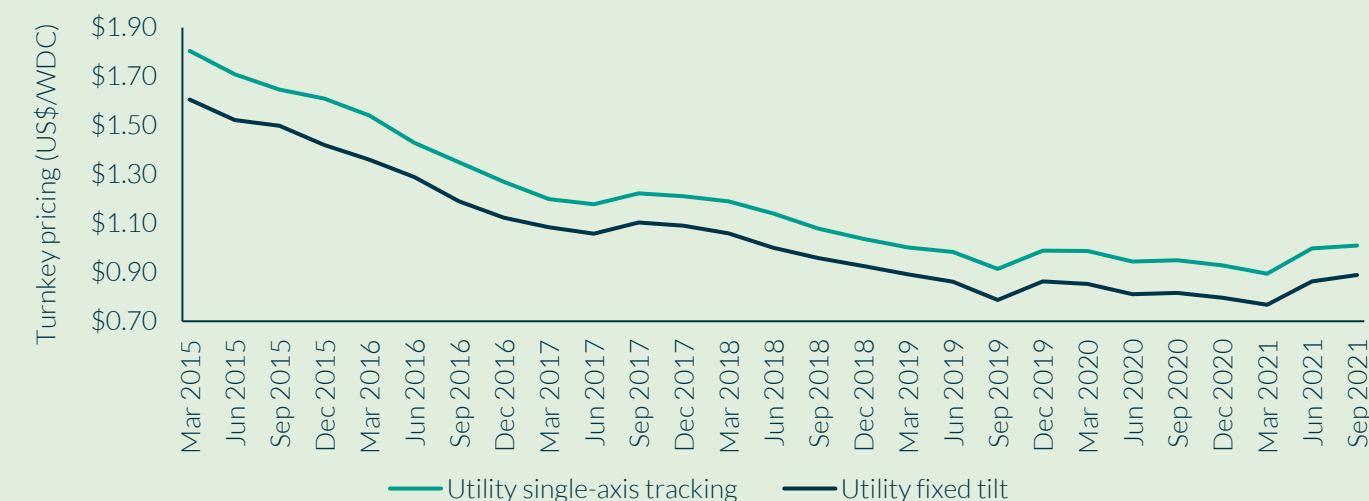
**Figure 2: New U.S. Electricity-Generating Capacity Additions, 2012-Q3 2021**



Source: Figure from SEIA and Wood Mackenzie U.S. Solar Market Insight Full Report Q4 2021, December 2021.

Following years of declining solar cost, cost pressures emerged in 2021 with the impact of the pandemic evident in supply chain constraints and price increases. The most significant price increases have come from higher input costs (steel, aluminium etc) and elevated freight costs. Prices in the utility sector have increased most significantly given the higher proportion of internationally sourced equipment, particularly modules. Distributed solar has fared better as it relies more on domestically produced modules and racking.

**Figure 3: Cost of Solar**



Source: Figure from SEIA and Wood Mackenzie U.S. Solar Market Insight Full Q3 2021 and Q4 2021 Report, September 2021 and December 2021.

36. BNEF 2H 2021 U.S. Renewable Energy Market Outlook, Tara Narayanan, Pol Lezcano, Chelsea Jean-Michel, October 12, 2021.

37. SEIA and Wood Mackenzie US Solar Market Insight Full Report Q3 2021, September 2021.



## USF PORTFOLIO

US Solar Fund is a business facilitating the transition to a low-carbon economy and to the mitigation of the consequences of climate change by generating clean, emission-free energy and promoting maximum efficiency in its operations. As at 31 December 2021, USF's portfolio comprised 42 operational solar plants.

SOLAR POWER PLANT	CAPACITY (MW <sub>dc</sub> )	LOCATION	COD	REMAINING PPA TERM (YEARS) <sup>38</sup>	PPA OFFTAKER	FIRST YEAR GENERATION (MWh) <sup>39</sup>	EQUIVALENT CO <sub>2</sub> DISPLACED (TONNES)	EQUIVALENT HOUSEHOLDS POWERED	EQUIVALENT CARS DISPLACED
Milford	127.8	Utah	Nov 20	23.9	PacifiCorp	277,500	238,700	31,000	51,900
Mount Signal 2	49.9	California	Jan 20	18.4	Southern California Edison	29,000	15,100	4,400	3,300
Suntex	15.3	Oregon	Jul 20	9.6	Portland General Electric	26,200	20,700	2,400	4,500
West Hines	15.3	Oregon	Jun 20	9.6	Portland General Electric	26,100	20,600	2,400	4,500
Alkali	15.1	Oregon	Jun 20	9.7	Portland General Electric	25,900	20,500	2,400	4,500
Rock Garden	14.9	Oregon	Jun 20	9.7	Portland General Electric	25,400	20,100	2,300	4,400
Chiloquin	14.0	Oregon	Jan 18	10.0	PacifiCorp	22,200	17,600	2,100	3,800
Dairy	14.0	Oregon	Mar 18	9.8	PacifiCorp	27,300	21,600	2,500	4,700
Tumbleweed	14.0	Oregon	Dec 17	10.0	PacifiCorp	21,600	17,000	2,000	3,700
Lakeview	13.7	Oregon	Dec 17	9.8	PacifiCorp	25,800	20,400	2,400	4,400
Turkey Hill	13.2	Oregon	Dec 17	9.8	PacifiCorp	26,300	20,800	2,400	4,500
Merrill	10.5	Oregon	Jan 18	9.8	PacifiCorp	20,600	16,300	1,900	3,500
Lane II	7.5	North Carolina	Jul 20	11.7	Duke Energy Progress	11,400	8,000	800	1,700
Pilot Mountain	7.5	North Carolina	Sep 20	11.7	Duke Energy Carolinas	11,200	7,900	800	1,700
Davis Lane	7.0	North Carolina	Dec 17	11.0	Virginia Electric & Power	10,300	7,200	800	1,600
Gauss	7.0	North Carolina	Oct 18	11.6	Virginia Electric & Power	10,100	7,100	700	1,500
Jersey	7.0	North Carolina	Dec 17	6.0	North Carolina Electric	10,700	7,500	800	1,600
Sonne Two	7.0	North Carolina	Dec 16	9.6	Duke Energy Carolinas	10,500	7,400	800	1,600
Red Oak	6.9	North Carolina	Dec 16	10.0	Duke Energy Progress	10,400	7,300	800	1,600
Schell	6.9	North Carolina	Dec 16	10.0	Virginia Electric & Power	10,400	7,200	800	1,600
Siler 421	6.9	North Carolina	Dec 16	9.6	Duke Energy Progress	10,400	7,300	800	1,600
Cotten	6.8	North Carolina	Nov 16	9.9	Duke Energy Progress	10,300	7,200	800	1,600
Tiburon	6.7	North Carolina	Dec 16	9.6	Duke Energy Carolinas	10,000	7,000	700	1,500
Monroe Moore	6.6	North Carolina	Dec 16	9.6	Duke Energy Carolinas	10,100	7,100	700	1,500
Four Oaks	6.5	North Carolina	Oct 15	8.8	Duke Energy Progress	9,300	6,500	700	1,400
Princeton	6.5	North Carolina	Oct 15	8.8	Duke Energy Progress	9,400	6,600	700	1,400
Tate	6.5	North Carolina	Aug 20	11.7	Duke Energy Progress	10,300	7,200	800	1,600
Freemont	6.4	North Carolina	Dec 16	9.6	Duke Energy Carolinas	9,700	6,800	700	1,500
Mariposa	6.4	North Carolina	Sep 16	9.7	Duke Energy Carolinas	9,900	7,000	700	1,500
S. Robeson	6.3	North Carolina	Jul 12	5.6	Progress Energy	9,000	6,300	700	1,400
Sarah	6.3	North Carolina	Jun 15	8.5	Duke Energy Progress	8,900	6,200	700	1,300
Nitro	6.2	North Carolina	Jul 15	7.9	Duke Energy Progress	9,100	6,400	700	1,400
Sedberry	6.2	North Carolina	Dec 16	9.6	Duke Energy Progress	9,200	6,400	700	1,400
Willard	6.0	North Carolina	Oct 20	11.7	Duke Energy Progress	9,900	6,900	700	1,500
Benson	5.7	North Carolina	Aug 20	11.7	Duke Energy Progress	9,800	6,800	700	1,500
Eagle Solar	5.6	North Carolina	Aug 20	11.7	Duke Energy Progress	8,500	5,900	600	1,300
Granger	3.9	California	Sep 16	14.7	San Diego Gas & Electric	8,000	4,200	1,200	900
Valley Center	3.0	California	Dec 16	14.9	San Diego Gas & Electric	6,200	3,200	1,000	700
County Home	2.6	North Carolina	Sep 16	9.6	Duke Energy Carolinas	4,000	2,800	300	600
Progress 1	2.5	North Carolina	Apr 12	10.3	Progress Energy	3,400	2,400	200	500
Progress 2	2.5	North Carolina	Apr 13	6.0	Progress Energy	3,600	2,500	300	500
Faison	2.3	North Carolina	Jun 15	8.3	Duke Energy Progress	3,400	2,400	200	500
<b>Grand Total</b>	<b>492.9</b>					<b>821,300</b>	<b>634,100</b>	<b>79,100</b>	<b>137,700</b>

38. As at 31 December 2021.

39. Estimates use the first year of each plant's electricity production once operational or acquired by the Investment Manager.





OPERATING SOLAR POWER PLANTS AS AT 31 DECEMBER 2021

NORTH CAROLINA PORTFOLIO

TOTAL NUMBER OF ASSETS	28
TOTAL GENERATING CAPACITY (MW <sub>DC</sub> )	168.3 MW <sub>DC</sub>
PPA OFFTAKERS	Duke Energy Progress, Duke Energy Carolinas, Progress Energy, Virginia Electric & Power & North Carolina Electric
FIRST YEAR GENERATION (MWH)	253,200
EQUIVALENT CO2 DISPLACED (TONNES)	177,300
EQUIVALENT HOUSEHOLDS POWERED	18,700
EQUIVALENT CARS DISPLACED	38,400



OREGON PORTFOLIO

TOTAL NUMBER OF ASSETS	10
TOTAL GENERATING CAPACITY (MW <sub>DC</sub> )	140.0 MW <sub>DC</sub>
PPA OFFTAKERS	PacifiCorp & Portland General Electric
FIRST YEAR GENERATION (MWH)	247,400
EQUIVALENT CO2 DISPLACED (TONNES)	195,600
EQUIVALENT HOUSEHOLDS POWERED	22,800
EQUIVALENT CARS DISPLACED	42,500



UTAH PORTFOLIO

TOTAL NUMBER OF ASSETS	1
TOTAL GENERATING CAPACITY (MW <sub>DC</sub> )	127.8 MW <sub>DC</sub>
PPA OFFTAKER	PacifiCorp
FIRST YEAR GENERATION (MWH)	277,500
EQUIVALENT CO2 DISPLACED (TONNES)	238,700
EQUIVALENT HOUSEHOLDS POWERED	31,000
EQUIVALENT CARS DISPLACED	51,900



CALIFORNIA PORTFOLIO

TOTAL NUMBER OF ASSETS	3
TOTAL GENERATING CAPACITY (MW <sub>DC</sub> )	56.8 MW <sub>DC</sub>
PPA OFFTAKERS	Southern California Edison & San Diego Gas & Electric
FIRST YEAR GENERATION (MWH)	43,200
EQUIVALENT CO2 DISPLACED (TONNES)	22,500
EQUIVALENT HOUSEHOLDS POWERED	6,600
EQUIVALENT CARS DISPLACED	4,900





