

# **NEXTENERGY**

## **SOLAR FUND**

**NextEnergy Solar Fund**

**TCFD Report**

for the year ended 31 March 2023

## Task Force on Climate-related Financial Disclosures (“TCFD”)

The challenge posed by climate change necessitates a complete transformation of the way the world produces and consumes energy. In August 2021, the United Nations’ Intergovernmental Panel on Climate Change (“IPCC”) published its Sixth Assessment Report, which stated “global warming of 1.5°C and 2°C (before pre-industrial levels) will be exceeded during the 21st century unless deep reductions in CO<sub>2</sub> and other greenhouse gas emissions occur in the coming decades”. This was further reinforced by the IPCC’s AR6 Synthesis Report, released in March 2023. The transition to a low-carbon economy is central to making meaningful reductions in global greenhouse gas concentrations, minimising long-term climate change impacts, and enabling a development trajectory that is sustainable on a global scale. This is reinforced by the UK government’s recent commitment to 70GW of installed solar capacity by 2035.

NextEnergy Solar Fund (“NESF”) sees renewable energy as having a crucial role to play in the low-carbon transition and in providing economic opportunities that support governmental mandates such as the EU and UK net-zero target by 2050.

To be a leader in ESG and responsible investment, accountability is paramount. The Investment Adviser has continued to deliver transparent reporting and enhanced existing disclosures, reporting on the Company’s impact and contribution to the Sustainable Development Goals and an ESG disclosures document to confirm compliance with EU SFDR, particularly Article 9, as well as fund-level EU SFDR Principle Adverse Indicators and Green Impact Reports, which disclose our contribution to climate mitigation.

The Company endeavours to communicate progress as we expand our low-carbon businesses capabilities, develop our policy engagements, build on our climate risk management strategies, expand our core ESG metrics, and pursue engagements with investors, stakeholders, and the wider solar industry in order to collectively address the climate challenge and promote the transition to a low-carbon economy.

### Introduction

NESF and NextEnergy Capital recognise that climate impacts should no longer be considered non-financial and have been an official supporter of the goals of the TCFD since September 2019. TCFD was established in 2015 with the aim of developing a comprehensive and uniform framework for climate reporting, enabling investors and other stakeholders to assess the companies’ climate-related financial risk. These risks may be categorised as follows:

- **Physical Risk:** These are risks related to the changes to the physical environment from the impacts of climate change in terms of intensity/frequency of extreme events (acute risks) and longer-term changes in climate (chronic risks)
- **Transition Risk:** Moving towards a low carbon economy will entail political, technological, legal, market and social changes that can create risks and opportunities to existing businesses and their underlying revenue streams

The Investment Adviser has been a leader within its sector for integrating considerations on climate throughout its organisation and within its decision-making processes. For the year ended 31 March 2023, the Company responded to the 11 recommendations set out by TCFD, with the ambition of continually expanding and evolving its implementation

and reporting in line with TCFD recommendations into future reports.

## Governance

1. The Board oversees climate-related risks and opportunities
2. The Investment Manager assesses and manages climate-related risks and opportunities

### Board

The NESF board has overall responsibility for NESF's performance and management. Understanding climate risk management processes is critical to the Board. ESG matters are more important than ever to investors, stakeholders, and society. Tracking progress and reporting changes in climate risk throughout the NESF value chain is a crucial step in tackling climate change, driving accountability, and ultimately delivering a sustainable future for generations to come. Climate considerations and progress updates are discussed during ESG Committee meetings and quarterly meetings with the Investment Manager. During such meetings risks related to climate change are discussed. The Governance Framework in the Governance section of the Annual Report sets out the board and committee structure, as well as the chair and responsibilities of the ESG Committee.

### Investment Manager/Adviser

The Investment Manager and Investment Adviser realise that the integration of a climate and ESG strategy into NESF's governance structures is imperative to effectively identify and manage potential risks. Under the leadership of NextEnergy Capital's CEO, climate-related matters have been integrated into the corporate Sustainability Framework, which is based on three pillars - Climate Change, Biodiversity and Human Rights. Continuing this emphasis

on business principles, the NextEnergy Capital ESG team has developed a Climate Change Position Statement, which was first published in March 2021. The Statement sets the ambitions, the reference standards, and the practice that the Manager adopts when dealing with climate-related risks and opportunities. The Manager's commitment to minimising both physical and transitional climate risks is evident not only in the nature of the business as a leading solar investment manager, but also in the activities undertaken by the individual departments of the business. The CEO and senior management of the Investment Adviser are responsible for actioning NESF's climate ambitions, while the Head of ESG is responsible for the strategy execution and for updating the NESF Board and Investment Committee members on recent climate-related activities and progress. The Head of ESG is a member of the NextEnergy Group Risk Committee which meets quarterly. The risk register includes climate-related risks and other ESG risks. The implementation of ESG and climate strategy is facilitated by a Sustainability Framework, which draws on SDGs as the structure by which risks are identified, managed, and reported across on a broad range of ESG issues that encompasses climate change and beyond.

NextEnergy Capital coordinates stewardship practices amongst senior management with an external public affairs agency. This partnership enables NextEnergy Capital, as an Investment Manager, to work closely with the government and its advisers to highlight the benefits of solar as an asset class, and an important part of the energy mix. In addition, NEC has participated in panel sessions on the natural capital value of solar farms and has contributed to the Department for Environment, Food and Rural Affairs ("DEFRA") consultation on biodiversity net gain. The

Investment Adviser is also a member of the Institutional Investor Group on Climate Change (“IIGCC”) and is currently participating in the Working Groups for the Paris Alignment Investment Initiative. The Head of ESG also sits on the board of Solar Energy UK (“SEUK”) and was recently appointed chair of the SEUK Supply Chain Working Group that is tasked with setting auditable ESG standards and a traceability programme for improving transparency and business ethics in the global solar supply.

### Asset Manager

Climate risks are assessed during each pre-acquisition and development phase through a screening questionnaire. When potential risks are identified, the ESG team, together with the investment team and, where relevant, external advisers, undertake a further risk assessment and agree upon the necessary mitigation measures to manage and minimise the impacts. Usually, an action plan that includes these mitigation measures is put forward and presented to the Investment Committee for approval. The action plan is then negotiated with contractors, including Engineering, Procurement, and Construction (“EPC”) and Operations and Maintenance (“O&M”), and then handed over to the asset manager of NESF, WiseEnergy. The Asset Manager oversees the implementation of these measures, including biodiversity management, land management, community engagement, and health and safety, amongst others. Reports on any progress towards these plans on a regular basis and, in addition, will measure and manage several selected KPIs based on the SDGs and the EU SFDR and Taxonomy Regulatory Technical Standards which have been identified as material to NESF’s business and operations.

## Strategy

1. Describe the climate-related risks and opportunities the organisation has

identified over the short, medium and long term

2. Describe the impact of climate-related risks and opportunities on the organisation’s businesses, strategy, and financial planning
3. Describe the resilience of the organisation’s strategy, taking into consideration different future climate scenarios, including a 2°C or lower scenario

### Climate-Related Risks and Opportunities

The Company understands that climate change poses risks and opportunities across all asset investments and can interact with multiple stakeholders. Through its commitment to providing clean energy, the Company is well-placed to help curb global carbon emissions, support biodiversity and maintain or improve land quality. Conversely, there are risks associated with such a transition and the potential physical consequences associated with rising temperatures.

The table below covers the key risks and opportunities, identified by NESF, faced over the short, medium and long term.

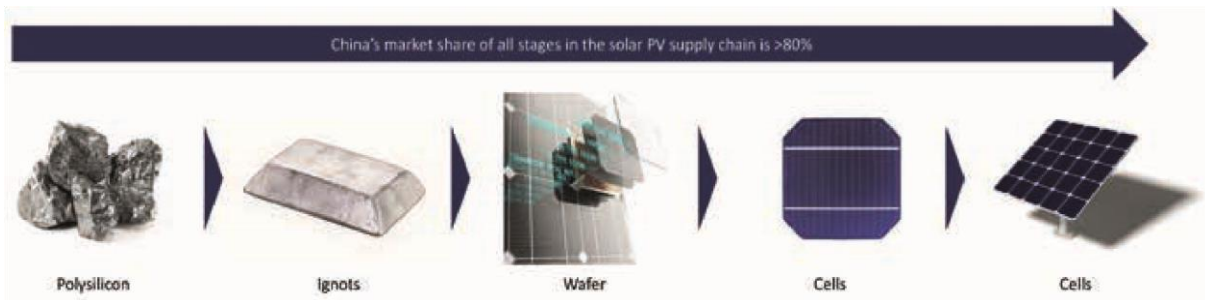
Term	Risk Type	Risks	Opportunities
Short < 5 years	Physical	The short-term risks are limited in severity as climate change risks are expected to develop over the medium to long term. Observed weather events to date suggest that the short term would see a continuation and slight increase in extreme weather events (flash floods and heat waves). These have the potential to interrupt cash flows and damage assets. There is an expectation that higher irradiance, whilst increasing yield, will increase wear and degradation of parts, shortening useful life and increasing failure rates. To mitigate, this requires a maturation of the spare parts strategy and other investments in asset health as well as strategic assessment of relationships with key component manufacturers, installers, and maintenance providers.	Increased irradiance should enhance the energy yield from the portfolio. Coupled with storage this could represent a positive cash flow opportunity. Short-term planning and monitoring of the actual climate pathway will enable the portfolio to be positioned for resilience to future physical risks. Adaption can take many forms and there are opportunities to enhance resilience whilst also improving biodiversity, which in turn helps to mitigate climate change. Early mitigation actions, such as those described in the risk section, can provide a competitive advantage vs organisations who do not take action (ensuring robust spare part supply chains, securing access to parts and ensuring ongoing operation of plants).
	Transition	Government policy in jurisdictions the portfolio is exposed to, is to achieve net zero by 2050. This can primarily be considered an opportunity, but these policies will cause significant disruption to the energy mix and that can present a risk to power prices.	Renewable energy is clearly a vital component of meeting government net zero policies. The increase in demand for clean energy is the primary transition opportunity for the portfolio and future development.
Medium 5-10 years	Physical	These risks are dependent on which climate pathway develops but potential risks include:  <b>Water stress</b> – Italian assets exposed to extreme annual water stress, cleaning panels becomes difficult, efficiency drops and power output declines.  <b>Flooding</b> – UK assets are exposed to a heightened risk of flooding with the potential damage assets and restrict access to sites for maintenance.  <b>Temperature</b> – Italian assets exposed to rising temperatures and an increase in days with +35°C, reducing efficiency and power output declines.	The primary opportunity that climate change presents for the portfolio is an expected increase in electricity demand. Industrial cooling, in particular, can be linked to physical climate change and will increase electricity demand. This is in addition to further demands through the transition opportunities (eg electric cars).  There are innovations, such as agrivoltaics <sup>1</sup> , that can develop into opportunities depending on asset-specific micro-climates. Raising panels provides adaption to flood risk and presents an agriculture/biodiversity opportunity beneath them. In hotter climates the shade presents an opportunity for crop growth which wouldn't otherwise be possible and evaporation from the crops cools the panels.  The interplay with transition opportunity will also develop as physical climate change impacts become more observable, they will spur increased policy reaction and create transition opportunities (eg an increase in clean energy demand).
	Transition	There is a high degree of ambition in some transitional policies and as the implementation deadlines move closer there is a risk that policies are delayed. This may mean expected increases in demand for renewable electricity do not occur.	Government policy across a range of sectors will take effect in this period. In the UK, the Government has adopted a policy of transitioning to electric vehicles by banning the sale of new fossil fuel cars (excluding hybrids) by 2030. They have also banned the installation of gas boilers in new build homes from 2025, promoting low-carbon alternatives. They are also promoting the uptake of low carbon alternatives to gas boilers in homes, (such as heat pumps), with the government setting a target of 600,000 installations per year by 2028. The impact of this is an increase on overall clean electricity demand, especially when coupled with net zero policy, instigating a significant shift to renewables. This will create an opportunity for clean energy generation and storage.

<sup>1</sup> What's agrivoltaic farming? Growing crops under solar panels | World Economic Forum (weforum.org)

<p><b>Long</b> &gt; 10 years</p>	<p><b>Physical</b></p>	<p>The long-term risks are highly dependent on the climate change pathway that develops. The IPCC released their latest AR6 Synthesis Report in 2023, modelled pathways based on policies implemented by the end of 2020 are consistent with global warming of 3.2°C. This level of warming will exacerbate all of the risks identified in the medium term. In addition, instances of extreme weather events will increase significantly and resulting disruption will likely interrupt cash flows and damage assets. Adaption costs would be significant.</p>	<p>As with risks, the physical opportunities will develop in line with the climate pathway that manifests. These will be in line with those that have been identified in the medium term.</p>
	<p><b>Transition</b></p>	<p>The levels of uncertainty around long term policy positions create a risk. Depending on climate pathways that transpire, there could be dramatic shifts in policy. For example, if the expected impacts of an RCP8.5 scenario start to play out then governments may take emergency actions with far reaching consequences to try and recover the situation. The portfolio should naturally be positioned well, as the demand for clean energy should be ever present, but this would still present a challenging policy landscape to navigate and could have broader economic impacts.</p>	<p>If a controlled, orderly transition to net zero is enacted then the portfolio should benefit from high demand for clean energy. The impact of economies moving to net zero should limit temperature increases to below 2°C and reduce the physical risks too.</p>

## Supply Chain

The solar PV supply chain has a high degree of concentration risk in China with certain stages of the supply chain further concentrated within specific regions of China. This is demonstrated in the figure below<sup>2</sup>.



China's market share of the polysilicon, ingot, and wafer stages of the supply chain will soon reach 95% of the global

The concentration of polysilicon production in Xinjiang province (40% of global production) creates a particular vulnerability. The Xinjiang province already experiences extreme heat (temperatures of 40 °C) and significant floods. Should manufacturing and supply of polysilicon be disrupted by an increase in such events, then it is likely there would be a significant decrease in the supply of solar PV panels and a corresponding price increase. The actual panel manufacturing is also highly concentrated with 80% of global supply coming from China and one in seven panels manufactured by a single company.

As the risk for climate to materially impact the global solar PV supply is so high, it requires consideration at the sector and governmental level on an international basis. NESF, through the Investment Adviser, actively participates in sector-wide initiatives to address supply chain vulnerabilities.

For operational assets, the supply chain considerations above become relevant for sites where repairs or upgrades are required. The demand for parts is expected to increase as irradiation increases but the vulnerability of the supply chain for these parts also

<sup>2</sup> <https://iea.blob.core.windows.net/assets/d2ee601d-6b1a-4cd2-a0e8-db02dc64332c/SpecialReportonSolarPVGlobalSupplyChains.pdf>

increases in certain climate scenarios. The concentration risk on parts suppliers means that interruptions due to extreme events are possible and this can lead to loss of revenue if sites are not operational. Additional considerations for operational sites are the impact on the operations and maintenance suppliers. These suppliers are diversified across the portfolio but one activity these contractors undertake is the cleaning of panels to improve their performance. For assets located in Italy, where temperature increase will exacerbate water scarcity, it is likely cleaning the panels will become less frequent and efficiency will drop as a result. Water efficient alternatives are being actively explored (e.g. dry cleaning and water recycling).

## Portfolio Investments

The productivity of a solar asset is highest when irradiance and temperature conditions are optimal. As temperature increases, the efficiency of solar assets falls because heat stress impacts critical equipment, such as inverters and transformers. The consistent and relatively cool climate makes the UK a strong location for the efficiency of solar assets. However, increased temperatures could lead to increased heat losses and inefficiency of NESF assets. Likewise, the Company's portfolio of eight Italian assets and its co-investment in Spain could face similar challenges.

These challenges can be mitigated with active asset management, ensuring the optimal condition of parts through maintenance and securing supply of replacement parts as required. This will enable the portfolio to take advantage of increased irradiation for higher yields. When coupled with storage and noting the expected increase in clean energy demand, the portfolio should be well positioned to exploit these opportunities.

The Company's asset manager, WiseEnergy, closely monitors the portfolio's assets throughout the year, measuring and monitoring many parameters, indicators and metrics covering both proactive and reactive considerations. This includes, but is not limited to, irradiation, generation, maintenance routines, audits and availability. This enables the Company to identify assets at risk and implement mitigation strategies to maximise optimal production in the future.

Increased greenhouse gas emissions are not simply associated with but also with other extreme weather conditions, such as storms, flooding and fires. All of NESF's assets have been constructed with a 1 in a 100-year assessment of likely wind conditions for the specific location of construction. One of the key benefits of the portfolio of distributed energy assets that NESF has is its resilience to any localised issues.

## Water-related risks

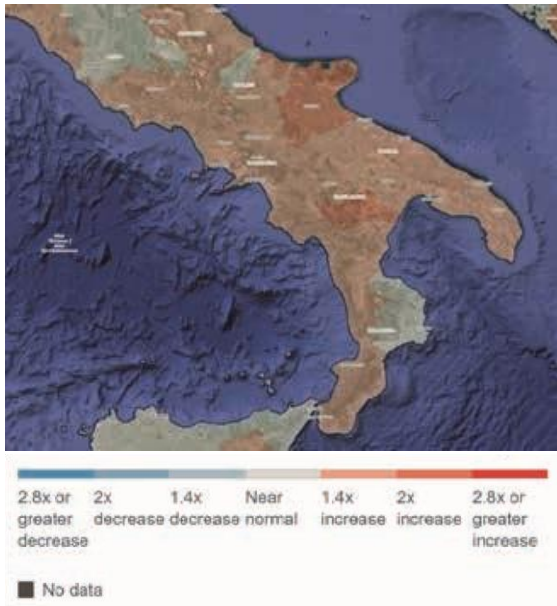
The portfolio is concentrated in southern England and southern Italy. These two geographies will have different exposures to the physical risks of climate change. One of the primary considerations is water which can take the form of a surplus (flooding) or deficit (drought/stress).

### Water stress

The assets in southern Italy have particular exposure to water stress as a result of increasing temperatures. Using the World Resource Institute's Aqueduct tool the change in water stress has been assessed. The tool uses a baseline of c.50 years of actual data (last updated in 2019). The forecast change periods are up to 2030 and 2040 using a range of climate scenarios. The maps below show the change in a pessimistic scenario, SSP3 RCP8.5.



**Italy 2030<sup>3</sup> Water Stress**



The 2030 map shows a 1.4x increase in water stress across the region where the Italian solar assets are located with some small areas reaching 2x. This directly impacts the makes the region more vulnerable to extreme events (flash floods from storms, earthquake vulnerabilities and socioeconomic impacts as labour moves away from the area).

**Italy 2040<sup>3</sup> Water Stress**



The 2040 map shows the expansion of regions with a 2x increase in water stress and some regions exceeding a 2.8x increase over

baseline. This exacerbates the issues identified in the 2030 map.

**Flood risk**

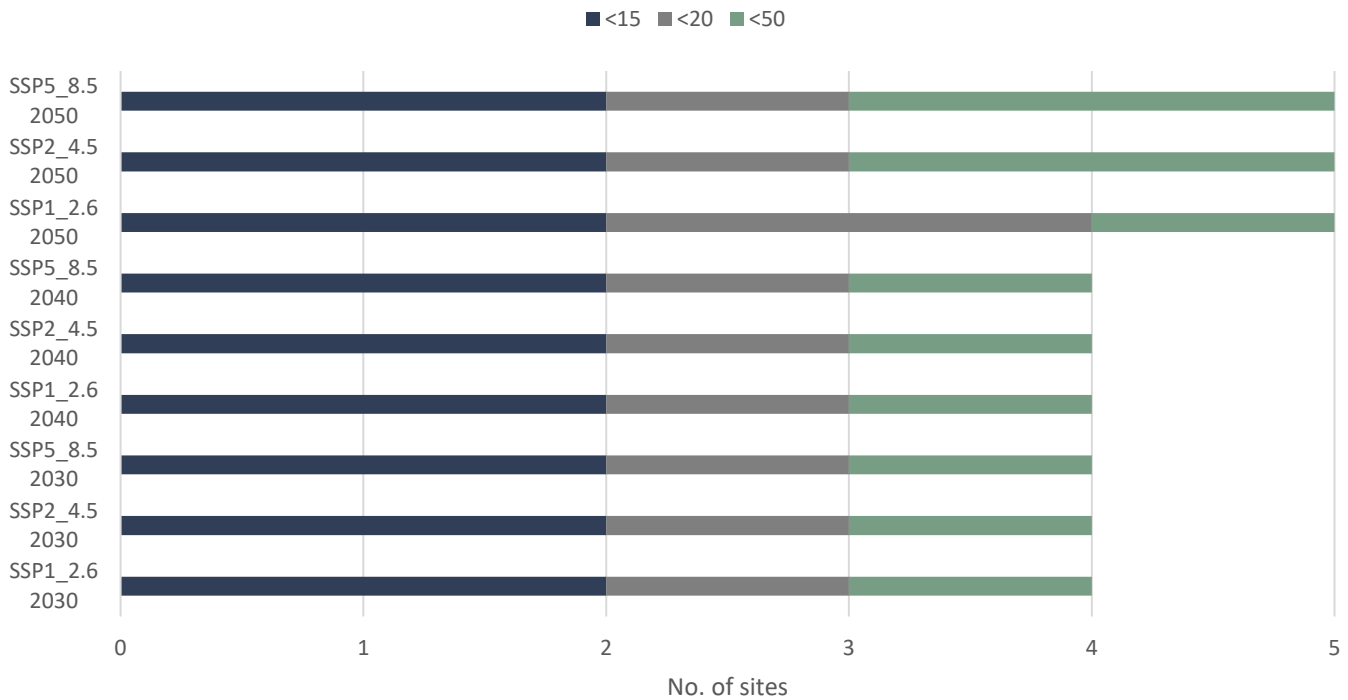
Water risk in the UK is based more on a surplus rather than a deficit so flood impact needs to be considered. The whole portfolio (including the Italian assets) has been assessed for location-specific flood risk in a variety of different climate scenarios. The flood risk assessment considers pluvial (precipitation related), fluvial (river overflows) and coastal sources of flooding. These are analysed at three different points in time (2030, 2040 and 2050) across three different climate scenarios (SSP1 2.6, SSP2 4.5 and SSP5 8.5 degrees). The data set is analysed to identify the sites at highest risk of flooding from a 1 in 100 year event under those scenarios.

<sup>3</sup> Source: World Resource Institute's Aqeduct 3.0 database



**Flood risk results**

**Flooding depth in centimeters**



The analysis identified four sites at risk of flooding in 2030 and 2040 and five sites in 2050. Of these, only one site was at risk of flooding by more than 50cm in depth in 2030 and 2040 but in 2050 for SSP2 4.5 and SSP5 8.5-degree scenarios two sites faced a flooding risk of more than 50cm in depth. Further analysis identified that the risk for one site in all scenarios was fluvial and the additional site in 2050 was costal flooding.

The initial data sweep is based on a radius around the site. For those sites identified at risk of flooding, a terrain mapping analysis has been undertaken. This shows the specific areas of the site which are at risk based on the terrain and proximity to source (rivers or coast). In most cases, it is only part of the site that is at risk. This level of detail allows consideration of appropriate flood defence measures. The situation can then be monitored over time and if the temperature scenario develops then the likelihood of the

risk materialising increases, and mitigating action may need to be taken. At this stage, the cost of mitigation adjusted for the probability of the scenarios occurring and discounted back to present value would not be a material financial risk to the portfolio.

**Pluvial Flooding SSP4.5 2040<sup>3</sup>**



### Coastal Flooding SSP4.5 2040<sup>3</sup>



The example flood maps are for the same site in an SSP4.5 degree scenario in 2040. They show two different types of flooding, the first is Pluvial. This type of flooding does not directly impact the site but does cut off access to it from the only two approaches (indicated by red arrows on the map). Whilst this limits the damage to the panels and equipment it does mean that not maintenance can be done during the flooding period. Flooding of surrounding areas can indirectly impact site performance and restricted maintenance could lead to a loss of revenue.

The second map shows the impact of coastal flooding in the same scenario and time period. This particular site is located on the coast of East Anglia. The coastal flooding is expected to be severe and whilst most of the site is clear, there a few incursions of water onto the site. This will likely cause damage and, as in the pluvial flooding, access to the site is also restricted.

The analysis highlights the sites most at risk and helps to identify the specific impacts from the risk. If these temperature scenarios become likely the fund is in a better position to plan adaption or mitigation actions.

## Financial Planning

There are some key challenges to the Company in relation to finances and cash flows because of climate change. The wholesale market price of electricity is affected by several factors, including demand, subsidies, fuel commodity prices and foreign exchange. As renewables become a greater proportion of the energy mix, the volatility in the availability of these renewable resources is expected to drive volatility in power prices and, subsequently, distributions to the fund and its shareholders. Increased concentration of solar assets also leads to cannibalisation, and the price captured on the market by solar is eroded over time.

The Company's hedging strategy aims to eliminate these risks associated with power price volatility. Some of the Company's investments benefit from subsidies and short-term PPA hedges that fix prices, with the remaining revenue streams subject to wholesale electricity prices. The Company has agreed fixed UK pricing (hedged) covering 87% of budgeted generation for the 2023/24 financial year, 44% of budgeted generation for the 2024/25 financial year and 13% for the 2025/26 financial year.

By contrast, this volatility could provide a significant opportunity to battery storage assets, which generate returns through such volatility. Optimising through its arbitrage involves charging the battery when energy prices are low and discharging during more expensive peak hours. The Company's investment objective allows investment in standalone energy storage systems (not ancillary to or co-located with solar PV assets owned by the Company) up to an aggregate limit of 10% of the Gross Asset Value, with active discussions with investors relating to increasing this limit to 25%.

The Intergovernmental Panel on Climate Change ("IPCC") uses Representative Concentration Pathways ("RCPs") as a basis for modelling future consequences of

anthropogenic greenhouse gas emissions and reflects a wide range of possible outcomes. There are 4 key scenarios: RCP2.6, RCP 4.5, RCP6, and RCP8.5. The four scenarios are outlined in the table below.

Scenarios RCP2.6 and RCP4.5 refer to pathways whereby significant efforts are made to reduce anthropogenic climate change. These scenarios assume the greater deployment of renewable energy and subsequently pose greater transition risks to businesses. As previously mentioned, this is associated with greater power price volatility and cannibalisation as solar (and other renewable technologies) becomes a greater proportion of the energy mix. However, as industries (such as transport) move away from fossil fuels and towards electrification, the subsequent demand increase is expected to offset such changes to the supply. However, insurance premiums may increase significantly if the instances of losses go up due to extreme weather.

The Company's Net Asset Value ("NAV") sensitivity analysis shows that a 10% decrease in power prices leads to a 8.9p decrease in the NAV per share and a 10% increase in power prices leads to a 8.6p increase in the NAV per share.

Alongside increased support for green investment, another key part of the RCP2.6 and RCP4.5 scenarios likely involve increased regulations aimed at actively mitigating CO2 emissions. These include carbon pricing that will impact organisations in countries that take part in emissions trading schemes or are subject to emissions taxes. The purpose of such strategies is to charge the hidden cost of carbon emissions to the source. It is expected that in low emissions scenarios, prices in existing emissions trading schemes are likely to increase. Whilst this could improve the commercial viability of renewable technologies, it may simultaneously drive up costs within the supply chain of solar

infrastructure assets. By contrast, under scenarios where limited efforts are made to reduce emissions (RCP6 and RCP8.5), global temperature increases are significantly higher than 2°C. This leads to several physical risk factors, such as extreme weather conditions, floods, and heat stress. Storms may put solar assets at risk of physical damage that could drive up operational costs and lead to losses in generation due to periods of repair. The existing portfolio of assets has a weighted average useful life of 26.3 and is designed to be extremely resilient to different weather conditions. There is also insurance in place to cover physical damage to plants that may lead to large financial and environmental losses.

Furthermore, higher emissions scenarios are expected to both increase average temperatures and the variance in irradiation. As previously mentioned, increased temperatures reduce the efficiency and productivity of assets due to heat losses and higher volatility in irradiation directly impacts the volatility of the Company's revenues. Our NAV sensitivity analysis shows that a 5% decrease in irradiation leads to an 5.6% decrease in the NAV and a 5% increase in irradiation lead to a 5.4% increase in the NAV.

Radiative Forcing	Atmospheric CO <sub>2</sub> equivalent (parts per million)	Description
8.5	>1,370	Worst-case emissions scenario, whereby no effort is made to curb climate change and emissions continue to rise throughout the 21st century
6	850	Emissions peak around 2080, then decline
4.5	650	Emissions in RCP 4.5 peak around 2040, then decline
2.6	490	Ambitious pathway, whereby emissions go to zero by 2100

## Risk Management

1. Describe the organisation’s processes for identifying and assessing climate-related risk
2. Describe the organisation’s processes for managing climate-related risks
3. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation’s overall risk management

The core business of the investment manager of NESF is focused on generating positive climate-related impacts through the reduction of carbon emissions associated with the clean energy generated by renewable energy assets. Despite no direct exposure to carbon-intensive sectors, the investment manager has identified certain physical climate risks as material to the business. NEC has reviewed the Company’s risk appetite to reflect the climate ambitions that has been expressed to stakeholders and have aligned it with NEC’s group-wide Risk Management framework. The Company will continue to refine its climate risk assessment approach in order to reflect the constantly evolving nature of climate factors and impacts.

Potential physical and climatic risks associated with the asset acquired or developed after 2020, are screened by the ESG team, and where there is evidence of potential risks, an

external climate risk advisor is appointed for further assessment during the pre-acquisition stage. The advisor will provide a climate change risk assessment report, which will inform the final investment decision. As a member of both the NEC Group Risk Committee and the NESF Investment Committee, during Committee meetings, the Head of ESG is responsible for advising on the ESG risks and opportunities associated with each acquisition and or development, including those related to climate.

## Risk Factors and Risk Assessment

The level of risk assigned to an investment is determined by investigating and engaging with involved parties over a wide range of factors throughout the due diligence process. While the risk level varies depending on the asset being acquired, certain risk factors can be more easily mitigated than others and as such, are classified with a lower risk rating due to their ability to be more readily managed.

The Investment Adviser’s ESG team have worked with an external consultant to develop an internal climate risk rating system that is aligned with the TCFD guidelines , a summary of which is overleaf. Carrying out this procedure enables the ESG team to highlight the severity of any climate-related risks

associated with the portfolio during the acquisition process and to determine which assets will require a third-party assessment to be carried out postacquisition. Based on the findings of the assessment, it is expected that mitigation measures will be presented by the advisor and passed onto the Asset Manager, ensuring the risk is monitored and reported on for as long as required and, where relevant, for the entire lifetime of the Project.

General classification	Physical risks	Possible consequences	Risk rating
Acute	Increased severity and frequency of extreme weather events (hurricanes, storm surge, heat waves)	Damage to property and infrastructure resulting in environmental damage, increased capital costs (e.g. repairs, cleaning, write-offs and possible early retirement of assets), decreased power generation, worker incidents (e.g. unable to access site).	Medium (Likely + Moderate)
	Fires		Low (Unlikely + Minimal)
	Flooding		Low (Likely + Minimal)
Chronic	Changes in precipitation patterns, solar irradiation and cloudiness	Reduction of anticipated power generation, increased losses in transmission lines, increased costs associated with more frequent or intense cleaning requirements and an increase in health and safety incidents as a result of increased changed weather conditions (e.g. heat stress associated with hot days)	Low (Likely + Minimal)
	Changes in dirt, dust, snow, atmospheric particles and others		Low (Likely + Minimal)
	Changes in mean temperatures		Low (Likely + Minimal)
	Water stress and drought	Decreased water availability increases cost to clean panels and domestic water to site	Low (Unlikely + Minimal)

## Metrics and Targets

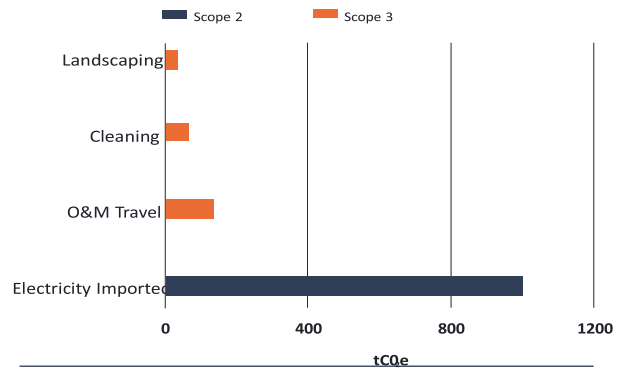
1. Disclose the metrics used by the organisation to assess climate-related risks and opportunities
2. Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas emissions, and the related risks
3. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets

We recognise the value in considering ESG metrics when identifying potential investment risks or opportunities. In terms of NESF's asset emissions, the Greenhouse Gas (GHG) Protocol has outlined the most effective framework for reporting on carbon emissions. The framework separates emissions into the following categories:

- Scope 1: Direct emissions from the activities of a company under its control, include fuel company-owned vehicles and air-conditioning leaks
- Scope 2: Indirect emissions from the purchase of electricity, steam heating, and cooling by the company
- Scope 3: All other indirect emissions that are embedded within the Company's value chain

NESF and its fund manager aim to obtain the GHG emission data directly from suppliers, although it is anticipated that this process will take time to achieve 100% coverage.

## Material Greenhouse Gas emission inventory



*Note: This graph is limited to operational emissions only. Supply chain and construction emissions are currently not included within this graph. NESF is in the process of expanding its coverage to include these considerations moving forward.*

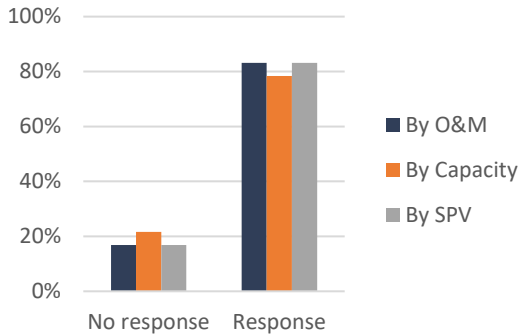
The chart above shows that total emissions were 1,319 tCO<sub>2</sub>e of which the majority relates to scope 2 imported electricity. The sites import electricity for operational activities (CCTV, monitoring equipment etc). The Company is actively exploring opportunities to source renewable energy to reduce these emissions. Scope 3 activities relate to outsourced arrangements with operations and maintenance contractors (service visits etc).

Description	Metric
Scope 1 GHG Emissions	NA <sup>1</sup>
Scope 2 GHG Emissions	1,169 tCO <sub>2</sub> e
Scope 3 GHG Emissions	150 tCO <sub>2</sub> e
Carbon Footprint	1.02 tCO <sub>2</sub> e
GHG Intensity	6.68 tCO <sub>2</sub> e

The calculation of these emissions is based on data collected from suppliers. The chart below shows the response rate in the current year's collection process. Overall coverage is approximately 80% and the Company is actively engaging with suppliers to improve this going forward.



### Data collection response rate analysis



Within the responses, there are further limitations. Rooftop/micro solar sites and sites with construction activity (repairs etc.) are not included in the current year. A collection plan is being implemented to capture this data in the future. Further limitations exist where data fields collected are unavailable (for example, fuel usage isn't tracked by all suppliers).

Data gaps and limitations have been addressed through estimates (except rooftop/micro solar sites and construction, which are omissions in the current year). For the remaining activities, estimates were developed in accordance with relevant guidance and standards (e.g. the Greenhouse Gas Protocol). Electricity imported is based on metered data and emission factors from the utility provider or DEFRA.

Data collection and quality is a complex and evolving process. The Company has taken significant steps during the year to improve this process and plans further such steps in the coming year.

### Targets

The Science Based Targets initiative ("SBTi") was established in 2015, with the goal of helping companies to set emission reduction targets in line with climate science and Paris Agreement goals. The Company is in the process of evaluating its target commitments.

### Outlook

The Company is aware of the potential for the effective management of climate risks and opportunities to impact returns and has therefore improved its disclosures in the current year and baseline for future performance and will be used to inform its SBTaligned targets. The Company is continuously striving to improve on its disclosures and processes to ensure risks are effectively identified and, where possible, mitigated.