Task Force on Climate-Related Financial Disclosures

The Company does not fall within the scope of the UK Financial Conduct Authority's climate-related reporting requirements but has chosen to voluntarily report in alignment with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations to increase transparency around its governance and consideration of climate-related risks.

This report comprises four pillars:

- **Governance:** information on the Company's oversight of climate-related risks and opportunities.
- **Strategy**: disclosure of actual and potential impacts of climate-related risks and opportunities on the Company's business, strategy, and financial planning where such information is material.
- **Risk Management:** a description of how the Company identifies, assesses and manages climate-related risks.
- **Metrics and Targets:** metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

The following chapters provide information on the Company's governance, monitoring and management of climate-related risks during the 2022/23 fiscal year.

Governance

Over the past 12 months, the Company has built on its commitments towards increased transparency and reporting of ESG-related metrics. Its first ESG & Sustainability report, published in August 2022, delivered disclosures for assets in Great Britain and Ireland covering a range of social and environmental metrics, including greenhouse gas emissions and energy consumption. The Company has increased the scope of these efforts over the reported period to include its German and US assets.

Through the Investment Manager, the Board has established a framework to identify and manage the Company's principal risks and opportunities, including those relating to climate. The Investment Manager reports to the Board on a quarterly basis, ensuring that the Directors are kept updated on progress and developments. This system allows the Board to guide and approve the Company's sustainability and ESG strategies, as well as conduct regular assessments of the Company's climate commitments and disclosures.

The Investment Manager's role in assessing and managing climate-related risks

The Investment Manager is responsible for the development, execution, monitoring, and reporting of the Company's sustainability strategy, including meeting the requirements outlined by SFDR for Article 8 products. The Company has also adopted a number of voluntary frameworks to guide its sustainability strategy and reporting, including the Task Force on Climate-Related Financial Disclosures (TCFD), the UN Sustainable Development Goals (SDGs) and the Principles for Responsible Investment (PRI).

The Investment Manager's ESG team works closely with the in-house commercial, construction, and asset management team to regularly review and implement the Company's sustainability strategy. Through this multi-teamed approach, the Investment Manager can implement more impactful policies and risk mitigation strategies for pre-operational and operational assets as well as pre-investment due diligence on pipeline opportunities. The Investment Manager also employs advisors who support the Company's ESG agenda and provide guidance on its approach to sustainability.

Additionally, the Investment Manager is responsible for ensuring the Company's assets are optimally managed and available to provide a range of services to the grid that enable the integration of higher proportions of variable, renewable energy. This activity plays a vital role in transitioning to a low-carbon economy and is a central component of the Company's sustainability strategy.

Strategy

The Company recognises the potential impact of climate-related risks and opportunities on its operations. It has, therefore, adopted the recommendations by the TCFD to effectively identify and manage its risk exposure and explore climate-related opportunities.

Climate-related risks and opportunities can be classified as transitional and physical. Transitional risks and opportunities arise from the transition to a low-carbon economy and can relate to changes in policy and legal frameworks, new technologies, market responses, and reputational considerations. Physical risks refer to the impact of acute climate-driven events, such as extreme weather, as well as long-term shifts in temperatures, precipitation patterns and variability in weather patterns.

The table below provides an overview of climate-related risks and opportunities applicable to the Company's business.

Figure 3: Identified climate-related risks and opportunities

Category	Overview	Climate factor	Risk/Opportunity
Transitional risk	The risk to the Company from the transition to a lower carbon economy.	Regulation	**Policy and legal** – differences in local, national and global requirements.
		Investor preference	**Market** – new dynamics and non-linear relationships affecting the size of the supply, demand and costs.
		Investor preference	**Reputation** – shifts in societal awareness, interconnected issues driving impacts and actions, often enabled by the internet.
Transitional opportunity	Changes in the business landscape from the transition to a net zero society.	Sustainable financing	**Access to capital** – potential future reduction in debt financing due to the fund's eligibility for green financing.
		Valuation	**Increase in the Company's share price** – increased market capitalisation due to investor appetite for companies contributing to the energy transition.
Physical risk	The risk to the Company from the physical impacts of climate change linked to extreme weather events.	Regulatory policy and legislation	**Environmental pollution** – caused by an inability to recycle batteries at the end of life, irresponsible use of natural resources used as raw materials, biodiversity disruption at battery energy storage sites, uncontrolled and excessive emissions from the facility.
		Exposure to extreme weather conditions and changes in climate and weather patterns	**Location** – number of Special Purpose Vehicles (SPVs) exposed or affected, projected loss or damage to project infrastructure or supply chain; projected or identified cost of business interruption, insurance costs.
		Exposure to extreme weather conditions and changes in climate and weather patterns	**Financial** – projected or identified impact on revenues and expenditures, change in operating and capital costs, and insurance costs.
		Exposure to extreme weather conditions and changes in climate and weather patterns	**Reputation** – environmental impacts could trigger opposition from local communities and associations.
		Exposure to extreme weather conditions and changes in climate and weather patterns	**Health & Safety** – incidents of injury caused by natural disasters at a site.
		Exposure to extreme weather conditions and changes in climate and weather patterns	**Delayed commissioning** – delays in construction, permitting etc. caused by natural disasters at a site.
		Exposure to extreme weather conditions and changes in climate and weather patterns	**Total or partial damage to assets** – caused by natural disasters at a site.

Transitional opportunities have emerged due to increasingly ambitious climate policies and emissions reduction targets, strong growth of low-carbon sectors and the proliferation of green technologies. Since the Company acquired its first assets in 2018, the share of electricity generated from wind and solar in the UK has grown from 21% to almost 29%[26]. Globally, total renewable electricity capacity is projected to increase by 2,400 GW between 2022 and 2027[27], reaching 38.1% of total electricity output in 2027.

The rapid deployment of renewable energy generators increases volatility and instability in traditional power systems, posing huge challenges to grid operators. This creates additional demand for energy storage systems, such as the Company's, that can receive, store and deliver energy when needed while providing grid-stabilising ancillary services. Transitional climate-related considerations are, therefore, key to the Company's overall strategy.

26 Ember: https://ember-climate.org/countries-and-regions/countries/united-kingdom/

27 International Energy Agency: https://www.iea.org/reports/renewables-2022/renewable-electricity

Physical risk assessment

In 2022, the Company conducted its first climate risk assessment, covering investments across the US, GB, Ireland, and Germany. Supported by an external ESG advisor, the Company identified the ten assets that are most exposed to various climate-related risks and representative of the locations in the portfolio. For this report, the Company conducted another risk assessment for its newest asset in California – the Company's largest project to date and its first in the state. Based on the assessment, the asset was added to the list of high-risk locations, which are depicted in figure 4.

Figure 4: The Company's 10 assets most exposed to various climate risks and representative of the locations in the portfolio

Site	Location	Relevant climate risk
Big Rock	California, US	Baseline water stress[28], drought[29], extreme heat
Snyder	Texas, US	Baseline water stress, drought, extreme heat, wildfire
Mineral Wells	Texas, US	Drought, extreme heat, wildfire
Sweetwater	Texas, US	Baseline water stress, drought, extreme heat, wildfire
Brook Hall	Wiltshire, UK	Coastal flooding, drought
Boulby	North Yorkshire, UK	Coastal flooding, drought
Cenin	Bridgend, UK	Coastal flooding, drought
Lower Road	Essex, UK	Coastal flooding, drought
Porterstown	County Kildare, Ireland	Drought
Cremzow	Cremzow-Wallmow, Germany	Riverine flooding, drought

Climate change scenario analysis

Climate change scenarios are used to assess possible climate impacts on a firm's business, helping it to better align its strategy. Three scenarios have been considered for the Company's ten most at-risk assets listed in figure 4.

Figure 5: Climate change scenarios

1

Strong Mitigation
1.8C by 2100

This scenario represents the optimal sustainable path, also referred to as the Green Road (SSP1-RCP2.6). It encompasses socioeconomic and representative emissions pathways consistent with a gradual and pervasive global shift towards a more sustainable future. Carbon emissions begin to decline around 2020, and global mean temperatures will rise by approx. **1.8C by 2100**, in line with the target of the Paris Agreement on climate change.

2

Middle of the Road
2.4C by 2100

This scenario represents a middle path with challenges to climate mitigation (SSP2-RCP4.5). In this scenario, overall emissions continue to rise through mid-century before beginning to decline. This causes environmental systems to experience degradation and climate change to worsen through the end of the century. This is a likely scenario if governments and policy reflect a strong sense of urgency towards climate adaptation. Global mean temperatures will rise by approx. **2.4C by 2100**, but higher emissions raise the risk of tipping points.

3

High Emissions
4.3C by 2100

This scenario represents a future where the world continues its current trajectory, also referred to as Fossil-Fuelled Growth (SSP5-RCP8.5). Global markets are increasingly integrated, and total population and per-capita consumption have increased. Emissions peak around 2090 and global mean temperatures rise by approximately **4.3C by 2100**.

The scenarios were modelled over a 30-year timespan under three different global warming pathways in line with TCFD recommendations. The analysis evaluated the assets' exposure to the following hazards: water stress, heatwaves, wildfire, sea-level rise, flooding, and tropical cyclones.

28 Baseline water stress refers to the ratio of total water withdrawals to renewable surface and groundwater supplies.
29 Drought risk is defined by the severity and probability of a certain drought event, the population and assets exposed, and their coping capacity.

Hazard findings

Wildfires and heatwaves were found to pose the greatest threat to the Company's assets. Although the analysis found a significant risk of water stress across the portfolio, it is not expected to have a material impact on operations due to negligible levels of water consumed on site. On average, exposure to sea-level rise, flooding, and tropical cyclones was low across the three different scenarios.

Figure 6: Exposure to different climate risks by region under three climate change scenarios

Hazard	Scenario	United States	Great Britain	Ireland	Germany
Water stress	1	High	Low	Medium	Medium
	2	High	Low	Medium	Medium
	3	High	Medium	High	Medium
Heatwaves	1	Medium	Low	Low	Low
	2	Medium	Low	Low	Low
	3	High	Medium	Medium	Medium
Wildfire	1	Medium	Low	Low	Low
	2	Medium	Low	Low	Low
	3	Medium	Low	Low	Low
Sea-level rise	1	Low	Low	Low	Low
	2	Low	Low	Low	Low
	3	Low	Low	Low	Low
Flooding	1	Low	Low	Low	Low
	2	Low	Low	Low	Low
	3	Low	Low	Low	Low
Tropical storms	1	Low	Low	Low	Low
	2	Low	Low	Low	Low
	3	Low	Low	Low	Low

Impact: Heatwaves

High temperatures caused by heatwaves can reduce the operational lifespan of energy storage assets, as it can increase the rate at which the assets degrade. The Company's assets are designed considering the specific environmental conditions of each location, encompassing considerations for climate change and realistic extremes of both high and low temperatures. Since the Company's fleet includes a range of geographic areas, its assets are designed to operate in temperatures varying from -20C to 40C, with headroom and footroom factored in.

Risk Management

Climate-related risks are a distinct category within the Company's risk policy. The identified clime-related risks have been integrated into relevant subsections of other risk categories, such as operational and credit risks. This section of the report outlines the steps taken by the Company to identify, analyse, evaluate, treat, and communicate climate-related risks within its operations.

Identification

The Company employs various methods to identify climate-related risks, including technical due diligence before investment into pipeline opportunities, the Invitation to Tender process for Engineering, Procurement, and Construction (EPC) contracts, sustainability workshops conducted with partners and contractors, regular discussions within the Investment Manager's teams, as well as through seeking advice from specialist consultants well-versed in industry best practices and climate change risk assessment.

Analysis

The Company assesses the likelihood and impact of each identified risk and opportunity, determining a risk rating of high, medium, or low. As part of this process, the Company engaged an external consultant to conduct a climate change risk assessment covering assets in various locations. The assessment findings helped identify and categorise the portfolio's vulnerability to specific climate hazards and estimate the probability of those hazards occurring.

Evaluation

The Company aims to benchmark climate change risk ratings and assessment findings against its internal risk criteria, ensuring a comprehensive evaluation of risks.

Risk Treatment

Once climate-related risks are identified, assessed, and evaluated, the Company's risk management framework mandates the implementation of climate change mitigation controls. This includes assigning a designated risk owner responsible for developing and executing the controls to manage these risks effectively.

Recording and Reporting

As part of the Company's risk management framework, climate-related risks are recorded within a dedicated risk register. These risks are reported to the Board, the Investment Manager's internal teams and external stakeholders. By documenting and sharing this information, the Company ensures transparency and accountability in addressing climate-related risks.

Communication and Consultation

Effective communication with key stakeholders is crucial for creating a culture of risk awareness, understanding, and continuous improvement. Risk managers are required to engage in regular communication with stakeholders, fostering a sense of inclusion and promoting alignment with business goals and objectives. This also helps individuals understand their roles in the day-to-day risk management process.

Integration into Operations

Recognising the importance of climate change, the Company has integrated climate-related considerations into its EPC Invitation-to-Tender process. Additionally, the Company requests operational and maintenance (O&M) contractors to provide data that enables measuring and monitoring of climate-related risks.

By embedding climate-related risks within the Company's risk management framework, the Company aims to address the potential challenges posed by climate change proactively. Through a comprehensive risk assessment process, effective risk treatment, and transparent communication, the Company aims to build resilience, align its operations with sustainability goals, and mitigate the adverse impacts of climate change.

Metrics & Targets

The Company's climate-related risks and opportunities are primarily assessed using the following metrics:

- Renewable energy stored
- Net CO_2 emissions avoided
- Greenhouse gas emissions
- The metrics were calculated by external sustainability consultants and are identical to the metrics in the Company's SFDR report (for more detail on the data collection process, please refer to page 23).

Renewable energy stored

The Company was launched in May 2018 to support the energy transition through the deployment of energy storage systems. The technology is considered crucial to the decarbonisation of global grid systems by facilitating the integration of variable renewable energy generation. In deploying energy storage capacity, the Company's portfolio is able to store this power and discharge it when needed to support the balancing of energy supply and demand (figure 7). In doing so, the energy storage assets also support national climate targets and the decarbonisation goals of grid operators.

To help quantify the benefits of its assets, the Company has chosen to measure and disclose the amount of renewable electricity they store. During the 2022/23 fiscal year, the Company's assets stored 9,054 MWh of renewable electricity, enough to meet the annual electricity needs of over 3,000[30] homes in Great Britain.

Share of non-renewable electricity stored

While the Company's assets are key to supporting global targets for increasing integration of renewable energy, they can operate in grid systems that continue to use high levels of non-renewable electricity.

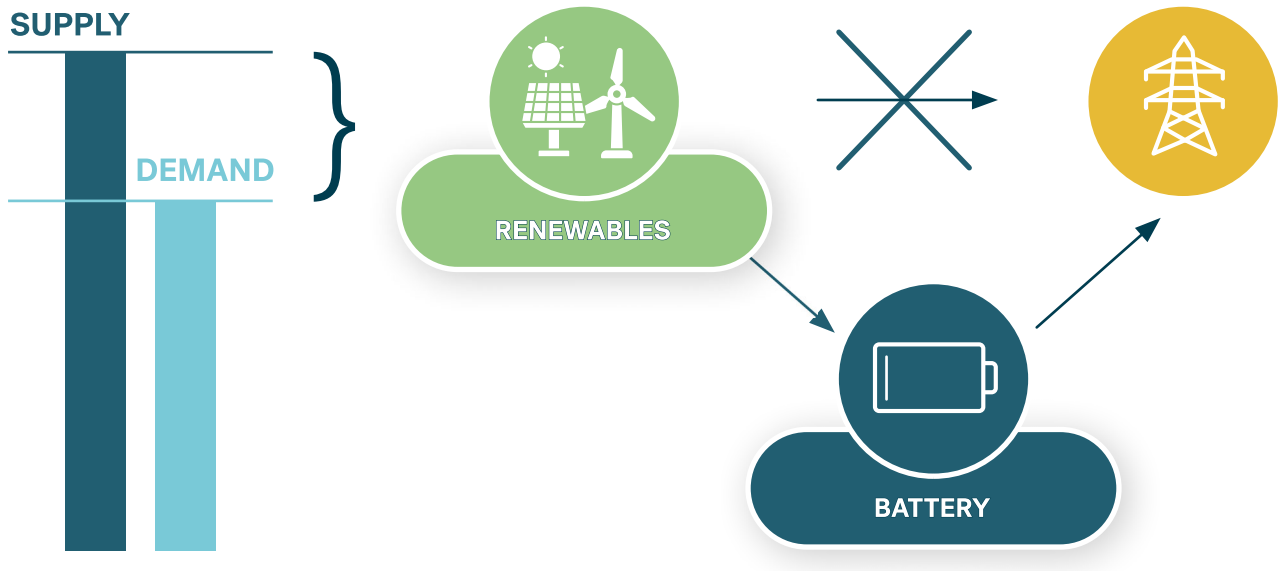
The 2022/23 fiscal year represented the first full reporting period in which the Company operated assets within the ERCOT grid in Texas. The state uses more natural gas for electricity generation than any other, with gas-fired power plants supplying about half the electricity generated in Texas in the 2022 calendar year. While Texas hosts the largest fleet of wind turbines in the country, renewables provided around 25% of the state's electricity in the same year[31].

The Company's entry into the ERCOT market was motivated in part by the need for energy storage to integrate existing and future renewable capacity, but the current energy mix means the Company's operational assets are exposed to high levels of non-renewable electricity. This means the share of non-renewable electricity stored by the entire portfolio is increased.

Hourly, half-hourly and quarter-hourly battery charging data and transmission system data on the percentage of renewables in the electricity generation mix were used to determine that 72.1% of the electricity consumed by the operational portfolio came from non-renewable sources.

This represents an increase on the previous 12 months when taken alongside recalculations to the previous reporting period's share of non-renewable electricity stored using an improved methodology. This increase is expected as part of the Company's ongoing work to facilitate the integration of renewables using energy storage and contribute to a reduction in non-renewable electricity. The Company, therefore, expects to see this share of stored electricity fall over time as thermal generators are retired and more renewables are added to the energy mix.

Figure 7: How batteries help to balance electricity demand and supply



30 Based on 2.9 MWh Ofgem estimate of annual typical household electricity usage: https://www.ofgem.gov.uk/information-consumers/energy-advice-households/average-gas-and-electricity-use-explained

31 US Energy Information Administration: https://www.eia.gov/state/analysis.php?sid=TX#111

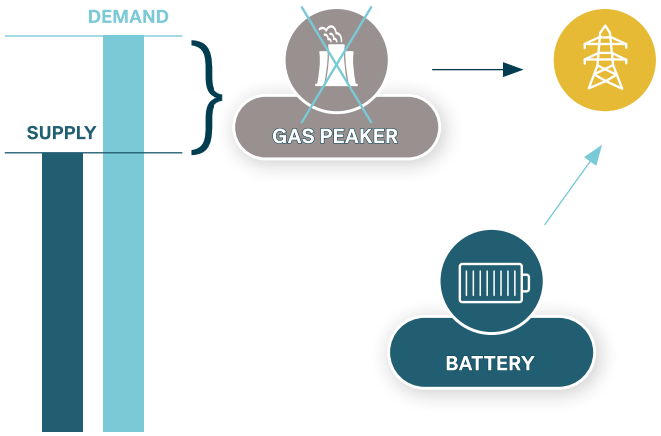
Net CO_2 emissions avoided

The methodology used to calculate avoided emissions is based on the difference between using the Company's operational assets to deliver power compared to conventional generation. The first scenario assumes batteries are used to import electricity when generation exceeds demand before later exporting to the grid when the inverse scenario occurs, while the second scenario substitutes this function with fossil fuel-based peaking capacity.

The assessment was based on hourly, half-hourly and quarter-hourly battery charging data from the Company's assets and information on the corresponding grid carbon emissions factors obtained from the electricity transmission system operators in Great Britain (GB), Northern Ireland (NI), Ireland (IE), Germany (DE) and the United States (Texas), respectively.

For most of the Company's assets, the results were compared to a reference scenario with the corresponding emissions that would occur if all exported electricity was supplied by a natural gas-fired peaking plant. The average carbon emissions intensity of gas-fired peaking plants in Europe is specified by the European Commission. An illustration of this can be found in figure 8.

Figure 8: The role of batteries in replacing fossil fuel-fired peaking plants



In the case of Texas, the assessment was compared to a reference scenario using emissions factors that reflect grid emissions rates during non-baseload periods in which a mix of non-baseload generation plants (e.g. gas-fired and coal-fired peaking plants) is deployed to support peak demand, as the US has these emissions factors publicly available.

The Company's external sustainability consultants used an updated methodology to account for the efficiency losses occurring between the charge and discharge of battery storage assets. This reduced the amount of net CO_2 emissions avoided last year to 441.92 tCO_2e. In 2022/23, the Company's net CO_2 emissions avoided amounted to 3,589.48 tCO_2e, a significant increase due to more operational assets in the portfolio, higher volumes of exported electricity, and decarbonisation progress in the UK.

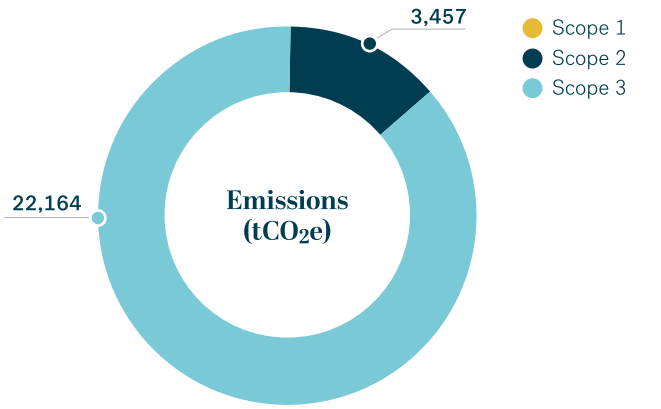
Despite being aligned with the EU methodology for assessing avoided emissions from generators and following guidance from the Greenhouse Gas Protocol, the Company believes the approach falls short of capturing the true value added to the grid by battery energy storage systems, which includes ancillary services such as frequency response. The Company continues to monitor industry efforts to refine the methodology for avoided emissions and remains open to the use of alternative metrics offering a better reflection of battery storage's contribution to the energy transition in the future.

Greenhouse gas emissions

The Company's total greenhouse gas emissions were calculated following guidance from the Greenhouse Gas Protocol. During the reporting period, GSF's assets emitted 25,621 tCO_2e, equivalent to the annual emissions of 2,033 UK households[32]. This represents a significant rise due to an increase in construction activity in the portfolio – in 2022/23, the Company had two facilities with a capacity of 128.8 MW under construction compared to just one 30 MW facility in the previous reporting period[33].

Scope 1 emissions were negligible[34] while Scope 2 emissions, stemming from the consumption of electricity, totalled 3,457 tCO_2e. Scope 3 emissions constituted the largest share of total GHG emissions – 22,164 tCO_2e – primarily caused by construction activities, the acquisition of batteries, and the impact of electricity commercialised downstream.

Figure 9: Breakdown of GSF's greenhouse gas emissions



32 Consequence: https://www.consequence.world/climate-bible/what-is-your-carbon-footprint-for-uk-household
33 2022/23: Stony and Ferrymuir. 2021/22: Porterstown
34 The Company's only source of Scope 1 emissions are fugitive emissions from refrigerants on site. As data on leakages was not available for the 2022/23 reporting period, this represents an estimate based on last year's results.

Reported metrics for the 2022/23 financial year

Figure 10: Performance measured against the Company's metrics during the 2022/23 reporting period

Metric Category	Metrics	2022/23 Performance	2021/22 Performance
GHG Emissions	Scope 1 emissions	- tCO_2e*	35 tCO_2e
	Scope 2 emissions	3,457 tCO_2e	4,340 tCO_2e
	Scope 3 emissions	22,164 tCO_2e	13,814 tCO_2e
	Total Emissions	25,621 tCO_2e	18,180 tCO_2e
	Carbon Footprint	106.58 tCO_2e / M£	138.74 tCO_2e/ M£**
	Weighted average carbon intensity	185.26 tCO_2e / M£	266.42 tCO_2e / M£**
Transition Risks	Exposure to companies active in the fossil fuel sector	No exposure	No exposure
	Share of non-renewable energy consumption and production	72.1%	69.9%**
	Energy consumption intensity per high-impact climate sector	0.31 GWh / M£	0.31 GWh / M£
Climate-Related Opportunities	Net CO_2 emissions avoided	3,589.48 tCO_2e	441.92 tCO_2e**
	Total renewable electricity stored	9,054.53 MWh	7,885 MWh

*The Company's Scope 1 emissions comprise fugitive emissions from refrigerants on site. Data on leakages was not available for the 2022/23 reporting period.

**Last year's results have been recalculated by the Company's third-party sustainability consultant using an improved methodology that captures the Company's impact more accurately.

Targets used to manage climate-related risks and opportunities

This table provides an update on the Company's progress during the 2022/23 reporting period towards the targets set out in its first TCFD report published in 2022.

Figure 11: Progress on climate-related targets

Targets	Progress	Outlook
1 **Continue to evaluate the data disclosed within the report and expand reporting to cover other cross-industry metric categories.**	The Company expanded the scope of its emissions reporting to include operational assets in Germany and Texas, while the climate risk assessment featured a new asset in California. The Company also worked with external sustainability consultants to improve the data sources and methodology of some of its ESG metrics, including net CO_2 emissions avoided and share of non-renewable electricity stored.	The Company will continue to monitor industry efforts to improve the net CO_2 emissions avoided methodology or find alternative metrics to capture the full value added to the grid by battery energy storage systems.
2 **Evaluate and set appropriate, quantitative targets for metrics in line with the strategy of the Company.**	The Company continued to work with its ESG advisers to develop climate-related targets.	The Company will publish its climate-related targets once finalised.
3 **Contribute to a greater reduction of the share of non-renewable electricity consumed in the grids that the Company operates in.**	The Company continued to invest in battery energy storage systems which allow renewable energy sources to contribute a greater proportion of electricity[35]. The amount of total renewable electricity stored by the Company's fleet increased by 15% YoY.	The Company will continue to invest in utility-scale energy storage systems to support the green energy transition.
4 **Increase research and development investment to improve the methodology of calculating emissions associated with energy battery storage.**	The Company worked with external sustainability consultants to improve the methodology of calculating its net CO_2 emissions avoided.	The Company will continue to monitor industry efforts to improve the net CO_2 emissions avoided methodology or find alternative metrics to measure the full value added to the grid by battery energy storage systems.

35 For more information on the Company's contribution to the energy transition, please refer to page 11.