CLIMATE OPPORTUNITIES AND RISK REPORT

Accelerating the Energy Transition





This report provides information on Quinbrook's overarching climate strategy including targeted alignment with the Task Force on Climate-related Financial Disclosures (TCFD) and guidance on the proposed International Sustainability Standards Board (ISSB) reporting under IFRS standards S1 and S2. These standards are focused on providing information on the materiality and financial impact of climate risks and opportunities to investors.

It covers the 12-month period from 1 January to 31 December 2022 and provides investors with insights into Quinbrook's core strategy accelerating the energy transition. Note that product specific risk and emissions data are incorporated into regular fund reporting.

It outlines Quinbrook's approach to climate-related investment, governance, risk management processes and assessment methodologies, in line with the existing TCFD framework and available data and expectations in relation to ISSB and IFRS S1 and S2. Quinbrook has been a supporter of TCFD since 2019.

The report provides valuable insight into Quinbrook's climate related strategy, governance structures, framework, methodologies and actions that have been prioritised over the past year. Furthermore, it outlines the targeted actions for 2023.

This report focuses on Quinbrook-wide initiatives to support the energy transition, climate resilience, adaptation and mitigation. While this may include climate risks, metrics and assessments specific to investments and funds, it does not include Fund-specific reporting. This is provided to investors on a regular basis, alongside Quinbrook's financial reporting and may be available on request.

Quinbrook's focus on investment in the energy transition stems from its core area of expertise, long-term Founder focus and role as an asset manager and fiduciary. Investment is focused on client preferences and investment objectives, seeking to achieve risk-adjusted financial returns. Quinbrook considers relevant and material investment risks and opportunities when considering investments, including those arising from the transition to a lowcarbon economy and related impacts on financial markets.



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Energy Transition and Climate Risk Report

Ouinbrook Infrastructure Partners (Quinbrook) is a specialist investment manager committed to advancing climate solutions. Quinbrook's core thesis, backed by over 20 years of Founder sector experience, is focused on creating value through investment in growth and new build assets and businesses that drive the energy transition at scale.

Introduction

Energy and fuel reliability, security and availability underpin the success and growth of our communities, businesses and industries.

Climate resilience, mitigation and adaptation present a \$196 trillion opportunity to invest in scaled solutions that will enable the energy transition, may support jobs, skills and local economic capabilities and industry. Climate change has been named by the United Nations as a risk to economies, food production, access to fresh water, habitable regions, and supply chains. In 2022, regulatory bodies have increasingly sought better transparency from companies on the links between climate risk, opportunity and investors' financial outcomes.

Since establishment, Quinbrook's central strategy has focused

on the build-out of new clean energy infrastructure assets and innovative businesses that deliver real and tangible sustainability, climate, and financial solutions on behalf of its investors.

For over two decades, Quinbrook's founders have specialised in investing in the opportunities arising from the energy transition and enabling solutions that can help to mitigate risks presented by climate change. Driving additionality and impact across energy, decarbonisation and climate investment has consistently been the central tenet of Quinbrook's investing strategies.

During the year, Quinbrook's investments were focused on investment in climate solutions - from scaled energy generation, battery storage, grid support, renewable fuel, waste reduction to water conservation, energy efficiency, heating, cooling, and technology solutions. Through Quinbrook's focus on newbuild infrastructure, growth businesses and energy reliability and availability, we were able to deliver real and enduring additionality and impact.

At the end of 2022, Quinbrook had cumulatively invested over US\$ 1.2 billion securing access



to over 20 GW and MVA of assets and managed portfolios, targeting vast opportunities in the market where Quinbrook has assessed critical market gaps growing industry demand.

Quinbrook believes it is operating at the forefront of the rapidly accelerating climate market, investing in and servicing innovative and key areas of industry and community. Such as utility and residential renewable energy solutions, data centres, transport, logistics, energy efficiency heating and cooling, virtual power plants, renewable energy fuels, storage optimisation, carbon and climate technology, and partnering with businesses and initiatives across food, agriculture biodiversity, and waste.

We are proud to share our 2022 Climate Opportunity and Risk report with you, which outlines our approach to investing in the energy transition, driving impact through additionality and growth investments, and actively managing portfolio strategies and risks. We have aligned our report with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and indicated guidelines of the International Sustainability Standards Board (ISSB) to date. Our investments are focused on

capturing upside opportunity, while seeking to protect value from downside climate and other risks, to enable ongoing impact and additionality, capturing targeted growth markets and building key solutions to drive innovation in climate and energy solutions, at scale.

Core Climate and **Transition Strategy**

Quinbrook's overarching investment strategy is based on driving value, impact and accelerating investment at scale across four key pillars of the energy transition:

CLEAN ENERGY AND FUEL GENERATION

Large-scale investment in climate solutions, chiefly through investment in newbuild or repowered renewable and clean energy assets or renewable fuels.

GRID STABILITY AND RELIABILITY

Improving industry and community energy access and security. For example, through battery storage, grid voltage and inertia support, demand response and digitalisation of energy and storage systems and controls.

INTEGRATED ENERGY TRANSITION SOLUTIONS

Climate investments aimed at providing sustainability and climate solutions for hard-to-decarbonise sectors such as data centres, industrials, transport, food, waste, critical minerals and the built environment.

WASTE, WATER, **BIODIVERSITY**, POLLUTION, **SOCIAL IMPACT**

Complementary solutions in water conservation, pollution reduction, biodiversity and land management, energy conservation, waste reduction, jobs, local economic, community and social impacts.

Climate Solutions and Energy Transition Impact to Date

22.3 GW

pipeline of renewable energy, fuels and grid support assets and investments

US\$ 1.2 BILLION

cumulative investment in the energy transition

100%

investment in businesses or assets providing climate solutions

794,733 tCO₂e

avoided emissions due to portfolio operations in 2022

8,000+ JOBS

estimated to be created over the lives of operational projects

US\$ 1.1

estimated in economic benefits to local communities over asset lives

5 PLATFORMS

driving renewable generation, storage, waste reduction, water conservation and energy efficiency across sectors and communities

10.4 TWh

renewable energy produced by portfolio assets



1.5 GW

of operational renewable energy assets

QUINBROOK INFRASTRUCTURE PARTNERS | ACCELERATING THE ENERGY TRANSITION REPORT 2023

Grid Support and

Battery Storage



Note: Selected Quinbrook assets operating and under development. 2. Scout Clean Energy sold during Q3.

Investing in Diversified **Climate Solutions**

During the year, Quinbrook has continued to target portfolio investments, aligned with clients' climate goals, that provide new climate solutions at scale. 100% of assets under management are intended to support the energy transition, through direct energy generation, storage, grid support and stability, technology and innovation, waste recycling, energy efficiency our other measures. By investing at early stages, Quinbrook can directly drive

impact in the energy transition. As an active manager, and typically majority investor, Quinbrook seeks to maintain high levels of governance and stewardship to implement aligned solutions across the asset and business life-cycle. Including selection of supply chains, implementing lower carbon solutions in planning, design, construction and development, establishing land management and biodiversity solutions, providing clean energy power or fuels, using lower carbon building materials and establishing policies and solutions in preparation for the end of asset life.



The transition to a lower carbon economy presents a substantial investment opportunity, estimated to reach as high as \$1 trillion over the next six years, according to the International Monetary Fund. Alongside this opportunity, are inherent risks in investment associated with climate-related physical and transitional financial factors. Similarly, to operational, economic and geopolitical risks, these risks require comprehensive due diligence, mitigation, and assessment to safeguard capital and identify potential areas of investment growth.

Quinbrook's overarching strategy is specifically designed to capture key areas of opportunity and investment within the energy transition, positioning its funds and assets to capitalise on and generate value from the energy transition while mitigating current and potential risks. This involves implementing both short-term and forward-looking strategies, fostering the development of new assets and growth businesses, enhancing operational efficiency, and driving innovation in technology. Throughout these endeavours, Quinbrook remains committed to managing risks effectively and investing in solutions that align with the goals of its clients.

of industry dynamics, over two decades of the Founder's to sustainability, and a diligent focus on managing risks.

- Quinbrook's approach combines a comprehensive understanding experience in energy and decarbonisation markets, a commitment

Summary of Quinbrook's Invested Sectors – Ranked by Emissions Reduction Potential

Inner circle – Sectors with highest need for emissions impact

Outer circle – Quinbrook's investment and asset management strategy and alignment with decarbonising high emitting sectors



Quinbrook's Core Sector Approach to Date

Throughout the year, Quinbrook has continued focusing on targeted investments in sectors and industries that we believe hold scaled market growth potential. Our investment approach prioritises areas that offer opportunities for long-term contracts with reputable counterparties possessing strong credit profiles, concentrated on sectors that demonstrate high demand for decarbonisation and solutions related to the energy transition.

Quinbrook's Investment Sector Focus – Building Additionality, Impact and Solutions In The Energy Transition

SOLAR	BATTERY STORAGE
New solar projects at scale, driving additionality and new generation capacity, new jobs, skills, energy availability and supply to communities and industry.	From residential to utility scale, benefiting from auxiliary and load- shifting demand.
and industry.	
RENEWARI E	GRIDS AND
FUELS AND WASTE	VEHICLES
Deriving renewable	Investing in assets
fuels from waste,	that provide inertia
Deriving renewable fuels from waste, and reducing food	that provide inertia and stability to
Deriving renewable fuels from waste, and reducing food and water waste,	that provide inertia and stability to the grid, reducing
Deriving renewable fuels from waste, and reducing food and water waste, and logistical energy	Investing in assets that provide inertia and stability to the grid, reducing industrial and
Deriving renewable fuels from waste, and reducing food and water waste, and logistical energy usage and demand.	that provide inertia and stability to the grid, reducing industrial and community risk
Deriving renewable fuels from waste, and reducing food and water waste, and logistical energy usage and demand.	Investing in assets that provide inertia and stability to the grid, reducing industrial and community risk of blackouts and
Deriving renewable fuels from waste, and reducing food and water waste, and logistical energy usage and demand.	Investing in assets that provide inertia and stability to the grid, reducing industrial and community risk of blackouts and improving grid
Deriving renewable fuels from waste, and reducing food and water waste, and logistical energy usage and demand.	Investing in assets that provide inertia and stability to the grid, reducing industrial and community risk of blackouts and improving grid resilience to
Deriving renewable fuels from waste, and reducing food and water waste, and logistical energy usage and demand.	Investing in assets that provide inertia and stability to the grid, reducing industrial and community risk of blackouts and improving grid resilience to support renewable

TA NTRES

rking with leading a centre providers, provide energy ciency, water servation, HVAC, lower carbon t environment ttions.

INDUSTRY AND SUPPLY CHAINS

Decarbonision solutions for industrial applications and supply chains.

CHNOLOGY, IOVATION AND MAND RESPONSE

tery optimisation, nand response energy and oon tracking and ing solutions.

Quinbrook's strategy as an infrastructure investor is grounded in consideration and foresight into the risks and opportunities associated with climate change and the energy transition it necessitates.

We believe Quinbrook is at the forefront of the climate movement as a financial institution, actively seeking opportunity in the energy transformation. Through its investment in climate solutions, we seek to drive direct impact across industry, society and the environment.

2022 Highlights and Actions

1 3,281 MW

of new-build clean energy and grid support assets operating or under active construction.

100% INVESTMENT IN CLIMATE SOLUTIONS

including renewable energy generation, storage, grid security and reliability, digital transition, energy efficiency, circular economy, energy efficiency, water and waste solutions.



3 \$876 MILLION

invested in decarbonisation of industry across data centres, communities, built environment, food production and industrials, and other hard-to-abate sectors, as at 31 December 2022.



score achieved for the latest reporting year across all submitted modules (Investment Stewardship & Policy; and Direct – Infrastructure)*.

5 climate scenario analysis

portfolio scenario analysis report by KPMG concluded that the portfolio is well positioned with potential upside value under a 1.5 degree scenario**.

6 LIFE-CYCLE CARBON FOOTPRINT ASSESSMENT

completed across all assets, supported by third-party assessment and alignment against reporting frameworks GHG, PCAF, IGCC and EU SFDR.

9 COMMITTED TO ACHIEVING NET ZERO BY 2040

by financing and implementing climate solutions. Central to this thesis is a direct approach to supporting investment in decarbonisation solutions for hard-to-abate sectors.

7 TECHNOLOGY AND INNOVATION

developed and invested in, to better optimise, aggregate, track, trace and drive greater value from energy transition assets.

10 CRITICAL SOLUTIONS – GRID, WATER, CONNECTIVITY AND WASTE

Quinbrook's investments provide broader decarbonisation and conservation impacts across data centres, the built environment and cities, food, logistics, transport, biodiversity and other vital sectors.



* Please refer to Quinbrook's Sustainability and Impact www.quinbrook.com for the Assessment and Transparency Reports ** Based on portfolio assessed as at Q1 2022

8 ACTIVE MANAGEMENT

across the portolio, enabled direct implementation of climate strategies and solutions, across power, water, waste and land management.

Investing Aligned with Global Climate and Infrastructure Goals

IIGCC calls on investors to prioritise net zero strategies and increase targets for infrastructure.

In March 2023, the Institutional Investors Group on Climate Change (IIGCC) released its inaugural net zero guidance for infrastructure, a complement to the Net Zero Investment Framework (NZIF). The report provided guidance across a range of issues unique to or pronounced within the infrastructure asset class, covering scope, targets, and actions to achieve alignment and decarbonisation in the real economy.

The report provides guidance for institutional investors to drive improvements and scale in portfolio construction and allocation, investment management, engagement, and stewardship in climate infrastructure and to implement. Quinbrook's strategy targets investment into assets and businesses that are positioned within key emerging areas of demand, need for resilience and opportunity as the energy transition continues.



Investments of Quinbrook's managed funds are dedicated to building and growing sustainable energy infrastructure, businesses technology and real asset-based solutions that have a long-term, positive impact on our climate, the environment, local economies, and communities and actively support the transition to Net Zero. This includes solar PV, battery storage, onshore wind, demand response, renewable fuel, industrial, transport and built environment solutions, digitalisation and energy efficiency measures and, in funds where the mandate allows, peaking natural gas that supports the ability for grids to decarbonise and increase in intermittent renewables growth while also providing energy security, reliability and dispatchability during peak demand or other critical instances.

Mobilising investment in low-carbon infrastructure technologies, such as renewable power generation, is central to meeting the 2015 Paris Agreement commitments of "holding the increase in the global average temperature to well below 2°C above preindustrial levels" and to pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels" by 2100.

Quinbrook's managed funds invest directly and at scale into assets and businesses that mitigate climate risks, support the transition to Net Zero and enable greater resilience to climate change, as well as supporting broader climate needs such as job creation, training, pollution and waste reduction, and economic impact, including to communities negatively impacted by climate change policy.

Quinbrook's strategy targets investment into assets and businesses that are positioned within key emerging areas of demand, vulnerability and opportunity as the energy transition continues, and in sectors where need for solutions is rapidly growing. For example, in data, supply chains, the built environment and industry where increasing user demand, geopolitics and other factors create significant opportunity to invest in energy transition and climate resilience, mitigation and adaptation solutions.



14.8 GW

Solar and storage projects in operations and development

1 MILLION

megawatt hours of renewable energy power expected from currently operating assets over the asset lives

> Projects designed to deliver

> > 100%

renewable power including during super peak summer demand

Investment in climate opportunities, mitigation, resilience and adaptation solutions is crucial to supporting coming shifts *in industry and society.* Quinbrook's strategy is focused on the core pillars of opportunity, impact, and innovation, targeting growth and new-build projects that directly build and enable the transition.



SOLAR





California, USA

Primergy is as specialist developer, owner and operator of distributed and utility scale solar PV and battery storage projects across the US. Primergy is currently developing over 14.8 GW of projects spanning from the US' largest solar and storage project to residential projects, to provide clean energy access to industry, schools and disadvantaged communities.

BATTERY STORAGE INTEGRATION AT SCALE

Primergy's largest projects are designed to provide key solutions in delivering more reliable renewable energy to US cities and towns during high demand super-peak summer periods. Primergy works with global teams to integrate, dispatch and control storage fleets and deliver landmark projects.

DELIVERING RENEWABLE POWER TO 45,000 CO-OP **MEMBERS and 35 SCHOOLS** AND COLLEGES

Primergy's CEDG Illinois portfolio provides 35 school and college sites with behind-the-meter solar power, under 25-year fixed price PPAs. The sites are expected to provide cost savings and lower pollution to the local schools

and agricultural communities. At operations, Primergy's Pitkin project is expected to deliver power to the 45,000 members of Holy Cross Energy in Colorado. In California, Primergy is developing projects for PG&E's Disadvantaged Communities (DAC) green tariff program, to provide residential customers with access to 100% solar power generated in the community.

CO-LOCATING BIODIVERSITY, AGRICULTURE AND CLEAN **ENERGY**

Innovative construction and land management practices have been implemented at sites to seek to support better financial and environmental outcomes. This includes agricultural biodiversity projects such as sheep farming and bee pollinator programs, designed to support local agriculture.

Decarbonisation of the economy coincides with the need to drive investment, jobs, economies, and water, food and supply chain security and innovation. Quinbrook has a wholeof-market approach,

invested in energy transition solutions across the target investment regions.

\$2.5

BILLION

750 MW

co-located battery

energy storage system

project, expected to

be one of the southern hemisphere's largest data centre campuses

DATA CENTRES AND STORAGE

Supernode

Queensland, Australia

Developing a digital economy in the Sunshine State, connecting Brisbane to the global cloud.

MISSION CRITICAL' DATA **CENTRE OPERATIONS AT QUEENSLAND'S CENTRAL** NODE

The Supernode Project is a \$2.5 billion, 750 MW Battery Energy Storage System (BESS) and 180 MW-IT data centre campus located across 30 hectares in Brendale, in the Moreton Bay Council area of Queensland. The site is currently under development, and on completion is expected to provide community and business connectivity, data accessibility, reliability and economic benefits, from its location at the central node of the Queensland Electricity Network.

INNOVATION IN WATER AND **ENERGY SECURITY**

In addition to the co-located BESS project, the site planning and design incorporated innovative water, energy efficiency and built-





environment solutions, including water collection and reuse capabilities, use of non-potable water from on-site condensate or rainwater harvesting. Built environment proposals included the use of lower-carbon concrete and other building materials, in addition to energy efficiency measures.

DIGITAL ECONOMY LEADERSHIP AND LOCAL **ECONOMY CONTRIBUTION**

The \$2.5 billion investment underpins critical IT/Data industries and provides significant infrastructure and data speed/ security incentive for the development of new industries in the local region. The project forms part of Moreton Bay's target to create 100,000 new jobs and to position the region as a hub for knowledge, innovation, to become Southeast Queensland's \$40 billion engine room.

30,000 LBS

of nitrogen sequestered annually at operating sites

9.8 MILLION gallons of waste

treated in 2022

45,000 MILES

estimated of additional trucking transport to waste treatment sides avoided annually

"PurposeEnergy's project allows us to send byproducts of cheesemaking to the digester via pipeline, creating renewable energy. This direct diversion eliminates the trucking of over 250 loads per month, reducing greenhouse gas emissions by more than 2,000 tons a year... By repurposing process organics into renewable electricity for Vermont residents, Cabot is providing award-winning dairy products while supporting commitments to our local communities."

> Jed Davis, Agri-Mark Family Dairy Farm



RENEWABLE FUELS



Vermont, USA

Revolutionising food and beverage processing, use and reclamation of organic waste.

CONVERTING ORGANIC WASTE STREAMS TO BIOGAS

PurposeEnergy

Headquartered in New Hampshire, PurposeEnergy uses proven technologies developed and patented by the company to convert organic waste streams to high value bio and renewable gas that is sold to customers under long term contracts. The company develops, designs, constructs and operates projects that have delivered solutions enabling customers to materially increase production and improve the economics of their core business.

IMPROVING CIRCULARITY AND CARBON FOOTPRINT OF FOOD WASTE

PurposeEnergy has developed, designed and built seven projects that support the business and decarbonisation objectives of some of the largest food and beverage companies in the world, including Danone, Franklins and Unilever. The systems enable biogas to be produced, reduce waste products and can additionally fuel on-site boilers, reducing manufacturer's reliance on natural gas while improving a plant's carbon footprint.

MEETING RAPID GROWTH IN DEMAND FOR RENEWABLE FUELS

The investment seeks to deliver the capital resources, enhanced commitment to waste management, and additional strategic relationships to support the growing demand for renewable fuels and provide solutions to meet food industry waste regulations.

800 MW+

contracted virtual power plant of flexible assets

1S1

demand response aggregator in Britain

£20M REVENUE

earned for customers

Flexitricity created the first demand response portfolio in Great Britain and continues to bring flexibility and revenue to customers, increasing energy and asset reliability, reducing national CO2 emissions and helping to secure energy supplies. Providing and developing demand response technology to energy, battery storage, food and logistics businesses across Britain.

Flexitricity provides critical demand response and revenue optimisation services to customers, primarily to owners of peak power, battery storage assets and to support a variety of cold storage, logistics, farming and electric vehicle and industrial sector customers. This has included a partnership with Jones Food Company, a vertical





Edinburgh, UK

ELECTRICITY

farming company providing locally grown salads to customers in the UK, helping to improve operational energy efficiencies and revenue through providing electricity system. Flexitricity provided expertise in flexible energy-consuming assets on site to help National Grid balance the fluctuating demands of the UK energy system.

>5 GW-IT

of load equivalent data centre projects across the US

50+ POINT

built environment, water and energy efficiency design framework to drive innovation and progress in sustainable build

>\$2 BILLION

required equity investment

"Decarbonising both power and embedded emissions is a key step for data center operators to prioritise carbon-reduction efforts to achieve their environmental sustainability ambitions. Scope 3 is the next frontier in *key performance indicators* for the data center industry" Data Centre Dynamics



DATA CENTRE

Rowan **Data Centres**



Texas, USA

Building more efficient energy, water, and high-speed connectivity to major data hubs.

DEVELOPING MORE RESILIENT DATA CENTRES

Rowan Green Data was established in 2020 to provide more sustainable power, built environment and construction solutions for data centres in the US. Led by a team of former Meta, AWS and Google executives, Rowan delivers customised and configurable solutions that provide data centre customers with the flexibility, security, connectivity solutions to support decarbonisation of buildings and operations.

SUSTAINABILITY SOLUTIONS FOR THE BUILT ENVIRONMENT

The built environment is reported to contribute approximately 40% of global emissions. As the data centre industry rapidly scales to meet data demands, energy and water efficiencies and lower carbon building material solutions are central to the long-term growth and sustainability of the sector. Rowan works with hyperscale and co-located tenants to design and build projects.

Many industries are seeking decarbonisation, but need a financial and technical partner that can provide experience across the spectrum of solutions required. Quinbrook's investment and portfolio teams provide up to two decades of experience in energy transition markets, comprised of specialists across industry sectors.



SOLAR

Eco-Industrial Precinct

Townsville, Australia

Decarbonising industry and supply chains.

Across the built envi is critical need to de emissions across the chain, from raw mate final production. Qu investments support





ironment there
carbonise
e supply
erials to
inbrook's
the

decarbonisation of supply chain participants and the diversification of the physical footprint of supply chains across Quinbrook's target investment regions.

>145 MW

of dynamic containment managed across the UK



BATTERY



Oxford, UK

Optimising UK, US and Australian battery fleets through Al technology and innovation

INNOVATION AND **TECHNOLOGY TO OPTIMISE** STORAGE AND ENERGY USE

Habitat Energy

Habitat Energy is a specialist in Al-enabled battery optimisation and trading service. Habitat's proprietary software delivers real-time trading, forecasting and revenue generation in wholesale and ancillary services markets and manages over 145 MW of dynamic containment across the UK.

22 GW

pipeline assets across 24 US states

8.4 TWh

renewable energy generated date

65% YOY growth in scale,

An estimated 1 million

 tCO_2e were abated in 2022

by Quinbrook's invested and

exited portfolios, equivalent

to 16,535,086 tree seedlings

grown over 10 years.¹

prior to exit

WIND POWER

Texas, USA

INVESTING IN RENEWABLE ADDITIONALITY, GROWTH AND SCALE

Quinbrook acquired Scout as a start-up in 2017 for an initial investment of just US\$6 million, supporting a partnership with founder Michael Rucker to build a large-scale, vertically integrated wind power producer across the US. Scout rapidly grew into a fully integrated developer, owner and operator of a diverse and multi-technology asset portfolio spanning 1,200 MW of operational wind projects in four states and a pipeline of over 22 GW of wind, solar and storage projects across 24 states by the end of this decade.

collaboratively with industry, universities and government to build technologies, innovations and initiatives that can drive greater efficiency, usability, reliability and security of decarbonised power to supply communities and industries.

Both portfolio companies and Quinbrook work

independently and

1. EPA Calculator







Delivering additionality and wind power at scale to the US market.

LOCAL ECONOMIC AND **CLIMATE BENEFITS**

Over 130 landowners in regional areas have benefited from land lease programs, and local communities hosting Scout projects have benefited from more than 3,400 local jobs supported and over US\$240 million in committed financial benefits. Scout's operating projects have generated an estimated 8.5 TWh of carbon-free power to date, avoiding an estimated 6 million tCO2e of carbon emissions based on average grid intensities.

Alignment to Global Standards

In addition to portfolio company stewardship, Quinbrook has worked with various third parties to improve the robustness of emissions reporting and align with internationally agreed standards. Some of the resources used and parties engaged are shown below.

Embedding Climate Opportunity and Risk Assessment Across the Investment Life Cycle



The third-party experts, initiatives and standards depicted are for illustrative purposes only and are subject to change.



PREPARING FOR INCREASED MARKET TRANSPARENCY AND REPORTING

guintrace

Advanced blockchain solution developed by Quinbrook to track, trace and match renewable power production



UK national consultation group member for Task Force for Nature Related Disclosures framework

Quinbrook continues to work with industry groups or advisors to prepare for potential upcoming standards:



Proposed Sustainability Disclosure Requirements



Proposed Climate SEC Disclosure Rules

IFRS[®]

International Sustainability Standards Board Climate Related Disclosures expected to be effective January 2024

Investing in Climate Solutions

As an active manager, focused on additionality and growth in climate solutions, Quinbrook works across the investment and asset life-cycle to drive alignment with net zero pathways. Quinbrook's core strategy is built on developing new and growth assets, directly to support areas of market decarbonisation demand and to invest in solutions to accelerate the energy transition.

INVESTING ALIGNED WITH GLOBAL CLIMATE AND INFRASTRUCTURE GOALS



Quinbrook has put governance structures at the core of its climate and sustainability investment processes, helping to drive alignment, action, outcomes and responsibility at all levels.

Quinbrook's Board of Directors ("Board") is responsible for governing and overseeing the Company's strategy and associated climate related risks and opportunities. The Board is supported by Investment, Valuation and Audit, Risk and Compliance Committees.

Quinbrook believes that climate-related risk and opportunity oversight and assessment, and embedded functions and frameworks are critical at all levels: from the Board and Investment Committee to individual investment and asset management team members, through to asset operational teams, and even to external contractors engaged on-site and in the selection of counterparties. Members of the Investment team and the Investment Committee incorporate climate risk assessment and specific sustainable investment practices in due diligence investigations for each investment and drive key decision making to mitigate potential downside risk and capture potential or upside risk. This assessment is continued by the asset management teams and portfolio company management following investment completion to ensure ongoing adherence.

Quinbrook control and voting of portfolio company boards and meetings are in place to ensure operational alignment with Sustainable Investment policies and to discuss climate risk and other Sustainable Investment issues. Active management of climate risk, mitigation, and opportunity are core to Quinbrook's stewardship of portfolio companies.

Ouinbrook's Governance Structure



Quinbrook's TCFD-aligned governance actions in 2022 are reported in the below table, as well as targeted actions for 2023.

Actions Taken Internally and at Portfolio Companies

TCFD-ALIGNED GOVERNANCE ACTIONS IN 2022

- Implemented formal board climate risk reporting
- Completed third-party scenario analysis at 1.5°C vs 4°C degree
- Completed formal net zero pathway meetings with the portfolio companies
- Commenced comprehensive third-party life-cycle carbon methodology review
- · Board representation and climate oversight for all portfolio companies
- Regular training and planning with portfolio Executive Management Teams
- Implementation of climate solutions, focused on the energy transition, net zero alignment, water, waste, energy efficiency and biodiversity
- Head of Sustainable Investment appointed to Audit, Risk, and Compliance Committee
- Additional hires to sustainable investment team boosting the team's specific climate, carbon and technical, operational and industrial expertise

ACTION PLAN FOR 2023

- Complete a third-party review of Quinbrook's life-cycle carbon accounting in Q1 2023
- Complete first EU SFDR Period Statement filing (Completed)
- Become a formal signatory to the Partnership for Carbon Accounting Financials (PCAF) (Completed Q2 2023)
- Construct more granular science-based net zero pathways for assets and funds, including interim target setting
- Undertake GRESB Infrastructure Assessment for select assets (Completed Q2 2023)
- Deliver ongoing training for Quinbrook employees and portfolio executive teams, driving implementation at asset level

Figure: Quinbrook's Governance Structure

Actions in Industry

TCFD-ALIGNED COLLABORATION AND INDUSTRY ACTIONS IN 2022

- UN PRI results achieving 100% in each submitted category, including stewardship assessment
- Ongoing member of the Net Zero Asset Managers (NZAM). Submission to CDP completed
- Partnerships working with the Imperial College of London, including sponsorship of the Climate Finance and Investment Centre and Climate Innovation Challenge
- Became a national consultation group member for the Task Force for Nature-related Financial Disclosures (TNFD)
- Joined ESG Data Convergence initiative
- Conducted regular and numerous industry engagements, conferences, webinars and teaching sessions
- Completed regular sector specific industry direct supplier, manufacturer or specialist engagement to collaborate on industry wide change, outcomes, innovation or progress
- Mentored startups in the EnergyLab Supercharge project, an incubator for clean energy storage and climate technology
- Member of the UK Power-to-X Leadership Council

ACTION PLAN FOR 2023

- Signatory to the Institutional Investors Group on Climate Change (IIGCC) (completed Q2 2023)
- Continuing support for the College of London's Climate Finance and Investment Centre and Climate Innovation Challenge
- Continuing mentorship provided to startups in climate technology through EnergyLab and London Imperial College
- Continuing work with investors and industry to improve transparency, life-cycle portfolio analysis and application to infrastructure class
- Consult on and actively implement frameworks and recommendations of the Task Force for Nature-related Financial Disclosures





Quinbrook's investment strategy is to accelerate the transition to a low-carbon economy – through new build renewable energy generation infrastructure, investment in grid and storage assets, and through industrial, transport, waste, efficiency and other climate solutions, businesses, and innovation.

Opportunity arising from the climate transition is central to Quinbrook's managed funds' investment strategies. In addition to its overarching investment thesis, Quinbrook identifies long and medium-term physical and transitional climate risks and opportunities as part of its investment screening process, financial models, asset management and exit strategies. The approval of each investment considers climate risks specific to the asset and geography and provides a view on the materiality of these risks.

Across the investment process and asset life, Quinbrook assesses and incorporates sensitivities to a range of climate parameters and scenarios and works directly with portfolio companies to measure, invest in, and implement mitigation, resilience and adaptation plans. This extends from investment in key solutions such as storage or decarbonisation technology, and improvements in efficiencies, biodiversity or land management. In addition to directly financing climate solutions, Quinbrook works with portfolio companies on climate adaptation and mitigation strategies, including recycling and end-of-life carbon reduction, energy efficiency, land impact minimisation, biodiversity, construction fuel reduction, embedded emissions, waste reduction, water stress, energy efficiency and other factors. This is a continuing area of core focus for the fund in 2023, determining clearer net zero pathways and 'last mile' approach planning.

Quinbrook's TCFD-aligned Strategy actions in 2022 are reported in the below table, as well as targeted actions for 2023:



Actions in Industry

TCFD-ALIGNED STRATEGY ACTIONS IN 2022

- Quinbrook invested US\$1.3 billion in infrastructure required for the energy transition to date
- Aligned all investment processes with emerging regulatory standards, analysing direct net zero contribution, enabling and transitioning allocations, carbon emissions and alignment with carbon pathways
- Identified potential effects of climate-related risks and opportunities on portfolio assets and integrated solutions into design, site selection, procurement, construction or operations
- Developed innovative technology solutions to improve granularity and transparency of emissions intensity usage at sites
- Assessed and implemented water conservation, power usage efficiency, energy efficiency, biodiversity impacts and other metrics where relevant at sites. This included, for example, co-siting of agri-voltaics at sites, efficient cooling systems and sites, and storage build-out and demand-side response and optimisation at scale

ACTION PLAN FOR 2023

- Ongoing investment, at scale, in climate solutions, focused on 'hard-to-decarbonise' sectors across industrials, data, supply chains, waste, food, agriculture, logistics and biodiversity
- Implementation of further net zero pathway 'last mile' solutions at sites
- · Direct implementation of climate, biodiversity, efficiency, water conservation, waste reduction initiatives at sites
- Continue supporting a sustainable energy transition and capitalise on climate-related opportunities
- Develop robust decarbonisation pathways and interim net zero targets at asset and fund level
- · Increase roll-out at sites of technology to improve measurement of emissions intensity at sites and
- To continue to assess the potential climate-related risks during decision-making process
- Develop and implement decarbonisation strategies at portfolio company level



Quinbrook has designed and implemented a disciplined approach to incorporate transition and physical climate risk assessment into decision-making, valuations, operations, and strategy across initial investment processes and during ongoing stewardship and asset management.

Risks are continuously assessed and are prioritised by the scale of impact and the likelihood of occurrence. These risks are then managed and mitigated at the asset level with the aim of supporting short and long-term value. The Figure below outlines Quinbrook's process for identifying and mitigating climate-related risks during the pre-investment, asset management and exit stages.

Quinbrook's Integration of Climate-Related Considerations into Investments

IMPACT PROCESS ACROSS ASSET LIFE

Pre-Investment Screening

Energy Transition, Net Zero, Climate focused strategy

Screenings and exclusions

Due diligence framework and SI financial sensitivity analysis

Investment Committee: SI risk, capital protection and opportunity assessment

Asset Management

Climate/sustainability related KPIs, structuring and contracting
Long-term governance milestones and alignment
Board representation, chairing and voting control
Portfolio wide controls – including supply chains
Day-to-day management and stewardship
Sustainability reporting and valuation impact assessment

Exit

Sustainable investment oversight supporing exit, market appetite and sales process

Demonstrated purchaser sustainable investment requirements

ACTIVE STEWARDSHIP

Investing for Climate Mitigation and Resilience

Climate presents both upside and downside risks to portfolios. Third-party assessment concluded that, overall, Quinbrook's portfolios were well positioned with potential further value upside under a 1.5 vs 4 degree scenario.

Each fund portfolio is constructed with the aim of being resilient, well-positioned, and adaptable to the physical and transitional climate risks inherent in future climate scenarios and changing policies.

Overall, Quinbrook believes that new climate policy and rapid renewable growth scenarios will:

- drive increasing demand for the purchase of renewable energy through a proliferation of increased purchase commitments, especially from corporate buyers;
- overall increase in renewable power demand to substitute carbon intensive supply source and heighten the critical need for more flexible, grid balancing and storage infrastructure to support accelerated decarbonisation

A summary of Quinbrook's core areas of sustainability and climate risk, opportunity, and impact assessment are shown below.

Quinbrook Investment Committee Sustainable Investment, Sustainable Risk and Opportunity Framework



Quinbrook has worked with KPMG and Carbon Intelligence (Accenture) to undertake a climate scenario analysis and life-cycle carbon analysis across Quinbrook's managed portfolios, considering climate risks and opportunities against two temperature pathways, 1.5°C Paris-aligned and 4°C (business as usual).

Overall, Quinbrook believes that its portfolios are positioned for high opportunity under a 1.5 vs 4 degree scenarios. This view is supported by KPMG's report¹ provided during the 2022 year, summarising that Quinbrook's portfolio is well aligned to a low carbon future, given the nature of our investments. Quinbrook's assets are of different technology types, regions and stages in the asset life cycle which presents diversified risks and opportunities for Quinbrook.

The climate impacts were grouped into two major categories, physical climate risk and transition climate risk. Physical risks are the exposure of Quinbrook's assets and/or value chain to physical hazards associated with climate change. Transition risk is the exposure of a business to regulator and market responses to curbing physical risks. The table below summarises the scenario assessment.



¹ Report based on 2021 data but report was provided during 2022

"Quinbrook's portfolio is well aligned to a low carbon future, given its assets are predominantly renewable power generation and storage. Given the inclusion of physical risk consideration in investment decisions, it is not surprising to see a low, or heavily mitigated physical risk exposure."

KPMG, 2022 Potential climate risks and opportunities assessment

Transition Risk and Opportunity Summary

OUTCOME

High Opportunity Portfolio companies are expected to experience potential upside in a 1.5°C vs 4°C scenario, benefiting from lower costs and increased demand due to their position in markets expected to grow through the energy transition

pricing, related policies, and changes to price of raw materials and water

QUINBROOK'S APPROACH

HighQuinbrook's portfolio is aligned to a low-carbon future, whereby transitionOpportunityrisks are considered as opportunities. The scenario analysis considered carbon
pricing, changes in gas pricing, decarbonisation of grids, wholesale market



To test the sensitivity of Quinbrook's platforms to transition risks, KPMG has compared the potential difference in NPV in a 1.5-degree climate scenario to a 4-degree baseline for different Quinbrook platforms.

The only platform that has been identified that could experience a negative performance is Flexitricity, due to the gas-peaking assets present in the portfolio. However, Flexitricity's gas peaking portfolio has taken into consideration in its base-case assumptions, greater value at risk, through embedded carbon pricing and asset life assumptions, than has been assessed by KPMG. Quinbrook believes this provides a level of assurance in relation to assumed risk mitigation measures and underlying assumptions within the gas-peaking portfolio.

All Quinbrook's other assessed platforms experience a potential upside in a 1.5-degree scenario as they benefit from lower costs, and where not capacity constrained, increased demand due to their position in markets which are experienced to grow through the energy transition.



KEY OPPORTUNITIES AND RISKS IN CLIMATE TRANSITION

Risks

TECHNOLOGY		MARKET (1)		MARKET (2)		REPUTATION		POLICY AND L	EGAL	TECHNOLOGY
Supply chain disruption may hinder the development of future sites. Quinbrook's sup chain is global and subject to geopolitical even including trade tensions, conflic instability, and unknown regular developments	oply nts war ets, tory	Oversaturation of intermittent renewables in the energy mix may re in curtailment of dispatch	esult	Greater compet in the renewable market as new entrants seek to investors' realloc of capital to low- carbon asset clas	ition es fulfil cation - sses	Failure to meet decarbonisatior targets would re reputational dar	n esult in mage	Regulatory developments w facilitate the ene transition, includ carbon pricing, subsidies, and ta breaks aimed at altering the pow generation mix	hich ergy ding ux er	Further downward movement in the levelised cost of energy for clean technologies leading to greater penetration of renewables due to price competitiveness as well as newer green tech becoming commercially viable
Short-term	•	 Short-term	•	Short-term	•	Short-term	•	 Short-term	•	Short-term
Medium-term		Medium-term		Medium-term		Medium-term	•	Medium-term		Medium-term
Long-term		Long-term		Long-term		Long-term		Long-term		Long-term

● High Opportunity ● Medium Opportunity ● Medium Risk ● Low Risk ● No Risk Identified

MARKET

Opportunities

Heightened demand for low-carbon products and services due to increased demand of green power to meet entities' decarbonisation goals. Additionally, as widescale electrification of industry increases, so will demand for clean power

Short-term Medium-term Long-term

•

spectrum of stakeholders

REPUTATION

Positive reputational

impacts expected from both developing

and using clean

energy by a broad

Short-term Medium-term Long-term



PHYSICAL CLIMATE RESILIENCE

No assets were identified to have a high risk (measured as impacting over 1% of platform value) of physical climate hazards to their asset value, adjusted for mitigation measures undertaken in asset planning and development, based on third party climate scenario analysis under a 1.5 vs 4 degree scenario.

The inclusion of physical risk consideration in Quinbrook's investment decisions has led to an assessment of low or heavily mitigated physical risk exposures.

To manage and mitigate physical risks, Quinbrook regularly employs third-party expertise where necessary to assess and monitor sites. Assets are built to rigorous standards and consider the risk of extreme weather events into their design.

Quinbrook is an active manager, working directly with portfolio company technical advisers, engineers and equipment procurement teams, biodiversity teams and others to implement climate mitigation, resilience and adaptation solutions, or to better stress test forward looking climate risk outcomes and prepare assets for potential eventualities.

As an investor who typically invests in projects at early stages, Quinbrook has extensive capability to better prepare assets for future risks and implement planning solutions upfront, seeking to reduce mid and long-term risks.



Internal and Portfolio Actions

QUINBROOK TCFD-ALIGNED RISK MANAGEMENT ACTIONS IN 2022

- Quinbrook incorporated climate scoring and sensitivity analysis in its investment evaluation processes, and a qualitative and quantitative climate risk assessment is carried out as a part of the investment due diligence process
- · Quinbrook continuously engaged with portfolio companies on risk mitigation processes for all investments
- Quinbrook worked directly with portfolio company technical advisers, engineers and equipment procurement teams, biodiversity teams and others to implement climate mitigation, resilience and adaptation solutions, or to better stress test forward looking climate risk outcomes and prepare assets for potential eventualities
- Mitigation measures included asset siting away from flood prone regions, extensive forward looking climate assessment, water stress precautions and usage minimisation, equipment selection, contracting adjustment to account for potential temperature extremes, supply chain assessment and many other mitigation measures

ACTION PLAN FOR 2023

- · To continue to implement climate-related risks and opportunities into the investment process
- To continue to extensively work with portfolio companies to measure and directly implement climate solutions
- To continue to invest in assets and businesses that we believe support the energy transition and Paris alignment and benefit from opportunities in the energy transition
- Ensure that portfolio companies have decarbonisation strategies in place

"None of the platforms" within Quinbrook's portfolio have been *identified as having* potentially high value risk to physical climate hazards."

– KPMG, 2022, Potential climate risks and opportunities assessment

CASE STUDY

SOLAR AND STORAGE: ADDITIONALITY AND IMPACT

Primergy Solar

As an infrastructure investor, Quinbrook seeks to capitalise on investment opportunities presented by the energy transition.

With the scale of change to energy systems required by Parisaligned climate objectives, Quinbrook has and continues to target opportunities in clean energy and climate solutions.

Primergy Solar ("Primergy"), a Quinbrook portfolio company, exemplifies investment thematically targeted due to the market and technology opportunities for solar PV and energy storage in the United States.

Primergy is a US-based business that develops, builds, owns, and operates energy storage and solar projects across North America. Primergy's operational goal to invest in and create new projects has a direct contribution to increasing renewable energy generation, clean power reliability, reducing carbon emissions through the avoidance of fossil fuel power in electricity generation, and promoting energy independence leading to healthier communities and strong economies.

Equally, consideration of transition risks is integrated throughout Primergy's operations, from pre-investment due diligence to exit planning.

For example, the technology and regulatory risk that solar PV and battery supply chains may be disrupted in future, particularly in the short-medium term, is a key risk identified for Primergy and considerable effort and expense has been deployed to mollify this risk. Solar PV and battery supply chains are inescapably global in nature, especially for large-scale (100 MW+) projects.

Primary undertakes detailed due diligence; employing expert local auditors, conducting on-site factory and asset inspections, developing strong relationships with key suppliers, engaging leading academics, hiring senior policy advisors in key jurisdictions, allocating risk with appropriate parties, and linking risk allocation and supply chain requirements to financial terms in contracts. While systematic risks around technologies, global policy, and supply chains cannot be eliminated, Primergy works extensively to manage and monitor risks in order to reduce exposure and potential impact.

\$1.1 BILLION

solar and storage investment in climate solutions by 2026

2.4 GIGAWATTS

of renewable assets forecast to be built by Primergy

100%

climate-related revenues and capex



>6 MILLION

tCO₂e in avoided emissions forecasted to be generated over total asset lives

CASE STUDY

CONNECTIVITY AND SUSTAINABILITY IN THE BUILT ENVIRONMENT

Rowan Digital -**Green Data Centres**

Rowan Digital Infrastructure ("Rowan") is a Quinbrook portfolio company designed to deliver sustainable solutions to data centres, which historically are highly energy- and water-intensive assets.

As computing needs and climate change impacts are set to increase, there's an opportunity and need to decarbonise these assets' operations and built environment. Rowan's scope of services includes land acquisition, built environment, energy and water sustainability solutions, renewable power supply and other infrastructure.

Rowan has identified and is actively developing multiple, strategically located sites across the US to host next-generation, mission critical, hyperscale data centres. Rowan aims to design and configure each site to deliver sustained and long-term competitive advantages and assist hyperscale data centre operators in meeting their accelerating carbon reduction and sustainability targets.

Energy usage and efficiency is a central part of data centre design and climate risk mitigation. This covers all assets, from supply chain, energy supply, energy management, and efficiencies in the built environment such as heating and cooling.



Energy usage and efficiency of the data centre built environment and power supply



Water stress physical risk and mitigation implementation framework





INFRASTRUCTURE CAPACITY

WATER EFFICIENCY, **STRESS AND CONSERVATION**

Whether the infrastructure is in place to allow data centres to consume water from an identified source and treat it for consumption





BUILT ENVIRONMENT **MATERIALS AND** CONSTRUCTION

Reduction in emissions during construction, logistics, and in the raw materials



CIRCULARITY AND REUSE

Opportunity for reuse of waste energy and building materials



ENVIRONMENTAL CAPACITY

The ability of location to provide sufficient water



CONSEQUENTIAL IMPACT

The marginal effects of water consumption on external stakeholders

INDUSTRY INNOVATION AND PERFORMANCE



A range of physical risks are assessed, identified, and managed by Rowan. A key physical risk for data centres is water stress as traditional data centres typically consume large volumes of water directly for cooling servers and indirectly through electricity generation. When assessing this physical risk, Rowan evaluates the following factors:

Industry data centre performance benchmarks²

OPERATOR	Operator Quinbrook portfolio sites (operating)	Microsoft	Google	amazon	Meta	Uptime Institute Market Average
Power usage effectiveness (PUE) ¹	1.02-1.05	1.18-1.40	1.06-1.10	3.6x greater energy efficiency than US median	1.09	1.57
Water usage effectiveness (WUE) ¹	0.2-0.3	0.1-1.65	0.24	0.25	0.26	1.8

² Sources: Equinix Sustainability (2021), Facebook Sustainability (2023 relating to 2021 buildings), Google Sustainability (2023) AWS Sustainability (2023), Data Centre Dynamics (May 2022) 1PUE for Temple is calculated as Gross Load / IT Load based on design; actual PUE is not available until the site is operational. WUE is in litres of water/k. PUE and WUE are targets reported by the operator and subject to change.

In addition to robust assessment of physical risks such as water stress, all Rowan sites are designed, in conjunction with tenants, with advanced sustainability capabilities, including in energy and water efficiency. Water stress mitigation measures implemented at Rowan's Temple Data Centre in Temple, Texas, include immersion cooling, which is a closed loop server cooling technology meaning that the system is filled with water once and thereafter doesn't require continued water supply. The Temple site design is estimated to save approximately 3 million gallons of water annually. Through such risk mitigation measures, in times of heightened water stress, which will become both increasingly frequent and severe over time, Rowan's assets will be resilient and flexible to the physical impacts of climate change.





Metrics

and WACI.

Quinbrook and underlying portfolio companies have processes in place to measure and monitor GHG emissions, energy consumption, energy generation, water consumption, waste and pollution produced, all at the site level. Quinbrook has targets relating to these factors at both a manager level and at a fund level.

In 2022, Quinbrook's portfolio emissions calculation methodology was assessed against TCFD, and other various best practice standards, including the Partnership for Carbon Accounting Financials (PCAF) and the Greenhouse Gas Protocol (GHG Protocol). Carbon emissions for all AUM are assessed and reported guarterly to investors. In addition to scope 1, 2, and 3 emissions.

Quinbrook seeks to track, model, and report on all carbon emissions on a portfolio basis, including scopes 1-3, avoided emissions, lifetime emissions,

Targets

Quinbrook is a signatory of the Net Zero Asset Managers (NZAM) initiative, which supports the goal of achieving net zero emissions by 2050 or sooner and to set emission reduction targets. This goal will be achieved and supported by the following targets and plans:

Actions in Industry

TCFD-ALIGNED METRICS AND TARGETS ACTIONS IN 2022

- Using a third-party to assess our portfolio emissions calculation methodology against global standards
- Reporting on additional metrics to investors and keeping in line with best practice
- Benchmarked carbon footprint performance against industry peers and outlined steps for emissions reduction

ACTION PLAN FOR 2023

- Keep in line with and continuously review climate-related metrics and targets to ensure Quinbrook is aligned with evolving industry expectations and standards
- Report on additional water metrics
- Setting additional fund-level interim net zero targets



Quinbrook's key climate targets are:

1) DEVELOPING NEW CLEAN ENERGY SOLUTIONS AT SCALE TO DIRECTLY ENABLE GLOBAL NET ZERO AMBITIONS

2) INVESTING IN FURTHER CLIMATE SOLUTIONS FOCUSED **ON HARD-TO-DECARBONISE AND HIGH GROWTH SECTORS**

- circular business models
- from its waste

3) SUPPORTING INDUSTRY AND INNOVATION TO DRIVE THE ENERGY TRANSITION

In addition to the actions listed in the table on the following page,

 According to the IEA, to achieve international climate targets, most significantly, the Paris Agreement's objective of limiting global warming to well below 2°C, new clean energy capacity and grid support infrastructure must be built. In order to achieve net zero by 2050, the global energy mix will have to be fundamentally reshaped, with the clean energy expanding from 29% to 90% by 2050²

• Quinbrook is actively developing new clean energy generation infrastructure, as well as the technologies required to support the shift to renewables, such as synchronous condensers to maintain grid frequency and stability

 In addition to developing new-build clean energy infrastructure, Quinbrook commits to investing more broadly in climate solutions, particularly in relation to decarbonising hard-to-abate industries. Likewise, Quinbrook is increasing focusing on investments predicated on more

• In 2023, for example, Quinbrook finalised its acquisition of renewable fuels specialist PurposeEnergy, which repurposes food and water waste from industrial food processing facilities, such as Ben & Jerry's ice cream, converts it into biogas through anaerobic digestion, and often resupplies the original industrial processor with the renewable energy produced

• Quinbrook commits to using its position as an investor and active asset manager to support and accelerate the low-carbon transition by stewarding carbon intensive businesses and industries towards emissions associated with a 1.5°C, Paris-aligned net zero trajectory

· Quinbrook is actively involved in supporting the development of new innovation, pathways and processes to enable the energy transition, through direct support and involvement with universities, regulators, industry bodies and participants and counterparties. Quinbrook also directly invests in solutions to better support the energy transition within its portfolios, improving tracking, tracing and transparency of climate and carbon impacts to benefit portfolio stakeholders

Climate metrics reported by Quinbrook, aligned with global frameworks

			European Commission	PCAF Provide for Determinant of Determinant of Provide for Provide for Provi	environment programme fin	
CLIMATE KPI					N2A0	
Carbon intensity per revenue (tCO ₂ e/£m revenue)		\bigcirc	\checkmark			
Total attributable financed emissions Scope 1, 2 and 3 (tCO ₂ e)				\bigcirc		
Total lifetime emissions (tCO ₂ e)						
Renewable energy produced (MWh)						
Energy intensity for electricity generating project finance (tCO ₂ e/MWh)						
Avoided emissions for renewable energy projects (tCO ₂ e)						
Investments in climate solutions (% of revenue or CAPEX)						
Exposure of to companies active in the fossil fuel sector (% of total investments)			\checkmark			
Share of non-renewable energy consumption & production (%)			\checkmark			
Energy consumption intensity per high impact climate sector (GWh/£m of revenue)			\checkmark			
Carbon Footprint (tCO ₂ e/£m invested)			\checkmark			
Weighted Average Carbon Intensity (tCO ₂ e/£m revenue)			\checkmark			
PCAF data quality score (1–5)	\bigcirc					



LIFE CYCLE ASSESSMENT (LCA)

As well as conducting Environmental Impact Assessments on proposed construction sites, Quinbrook also performs life cycle assessment modelling of projects under consideration for investment.

The goal of LCAs is to determine the value at risk and carbon profile of projects, from embedded emissions within assets to site decommissioning. The scope of the life cycle assessment of investments is cradle-to-grave/cradle-to-cradle. This seeks to incorporate into Quinbrook's carbon accounting emissions from raw material extraction, production processes, transportation, operations, and end-of-life disposal or recycling/ reuse. Where products can be recycled, Quinbrook includes these emissions in its LCA, which is known as 'cradle-to-cradle' LCA, but where products currently cannot be recycled or reused in line with circular economy ambitions, a cradle-togate LCA is used, which accounts for the emissions involved in decommissioning the asset. Quinbrook's investees strive to adopt opportunities for circularity whenever possible.

Quinbrook conducts end-to-end life cycle assessment of its assets and projects because material scope 3 emissions are included in the IIGCC's Net Zero Investment Framework and as such these emissions are incorporated into platform's science-based net zero targets. In addition to this, Quinbrook contends that scope 3 emissions, even where based on estimates, is important to disclose to Limited Partners (LPs) for transparency and for their own reporting.

This assessment provides crucial information in relation to opportunities to decarbonise assets across the lifecycle, demand for solutions across industries and relating investment need, and potential value at risk due to carbon and climate costs.

The life cycle assessment has been completed through both third party and direct diligence:

	SCOPE 3 SUPPLY CHAIN AND CONSTRUCTION			
Bottom-up emissions assessment	Portfolio companio and suppliers	Third p es (e.g. air and cor emissic	earty exper quality nstruction ons)	
	GLIDEPA	атн 📎	PCAF	
	maxe	on 🚦	Carbon Intelligence	
Aggregated full life-cycle review	Third par	ty LCA carbor	n review	
Development of 'last mile' decarbonisation pathways	Working directly with portfolio cor decarbonisation initiatives and stra			
Asset life modelling a companies. As an exa table below and indic Primergy's asse t	arcross all proj ample, Prime cates where e t life emis	ects is aggreg rgy's full carbo missions are f sions by	ated to pro on profile fi alling in the	
Asset life modelling a companies. As an exa table below and indic Primergy's asset lifecycle stage t	across all proj ample, Prime cates where e t life emis o be offse	ects is aggreg rgy's full carbo missions are f sions by et (tCO ₂ e)	ated to pro on profile f alling in th	
Asset life modelling a companies. As an exa table below and indic Primergy's asset lifecycle stage t	t life emis be offse Scope 3	ects is aggreg rgy's full carbo missions are f sions by et (tCO ₂ e) 3,292,864	ated to pro on profile f alling in th	
Asset life modelling a companies. As an exa table below and indic Primergy's asset lifecycle stage t	t life emis be offse scope 3 Scope 1	ects is aggreg rgy's full carbo missions are f sions by et (tCO ₂ e) 3,292,864	ated to pro on profile f alling in th	
Asset life modelling a companies. As an exa table below and indic Primergy's asset lifecycle stage t CONSTRUCTION	t life emis o be offse Scope 3 Scope 2	ects is aggreg rgy's full carbo missions are f sions by et (tCO ₂ e) 3,292,864 0 27,539	ated to pro on profile f alling in th	
Asset life modelling a companies. As an exa table below and indic Primergy's asset lifecycle stage t CONSTRUCTION	t life emis o be offse Scope 3 Scope 2 Scope 3	ects is aggreg rgy's full carbo missions are f sions by et (tCO ₂ e) 3,292,864 0 27,539 1,159,386	ated to pro on profile f alling in th	



DCC

SCOPE 1 & 2 ASSESSING OPERATIONAL EMISSIONS

Grid intensity databases, utilities and proprietary software



panies to implement egies.

luce carbon profiles for portfolio om 2022 to 2065 is shown in the life cycle of its assets.



2023 Progress and Goals

1.

Continue to invest in opportunities that support decarbonisation and the energy transition

2.

Continuously refine and integrate climate-related risks and opportunities into investments

3.

Work directly with investees to implement climate solutions, risk mitigation and adaptation actions and strategies, to support short-term, interim and long-term goals



PREPARING FOR UPCOMING REGULATION

Quinbrook's teams and portfolio companies report under various global standards including TCFD, EU SFDR, UN PRI and GRESB. These have prepared the portfolio for upcoming changes and regulations, which will see increased scrutiny, verification requirements and standardisation of climate and sustainability reporting. Quinbrook also works closely with investors to provide transparency and data needed to fulfill investors' own obligations.

REGULATION	JURISDICTION	IMPLEMENTATION DATE	DESCRIPTION AND HOW QUINBROOK IS PREPARING
Modern Slavery Act (UK and Australia)	UK and Australia	Current	Flexitricity is already reporting a Modern Slavery Statement to the UK Government and Energy Trade/Energy Locals is expected to reach the revenue threshold in Australia and so preparing to report a Statement too. More broadly, Quinbrook has rolled out formal modern slavery processes, including due diligence and risk management, across its portfolio
Inflation Reduction Act	US	August 2022	This bill included major spending on climate solutions, including investment tax credits and production tax credits, which will lower their green premiums. Quinbrook has and continues to target opportunities arising from this landmark piece of legislation
Sustainable Finance Disclosure Regulation	EU	January 2023	Initial filings completed in 2023. Continue to work with ongoing changes and refinements in the legislation
SEC Climate Disclosure	US	October 2023	US anti-greenwashing legislation is expected to have limited impact on Quinbrook's portfolio as it is aimed at public companies
Biodiversity Net Gain	UK	November 2023	The BNG regulation enforces developers to have a positive impact on sites. Quinbrook is incorporating BNG requirements into site assessment, planning in conjunction with EPCs and developers, and financial modelling where cost impacts may arise



REGULATION	JURISDICTION	IMPLEMENTA DATE
International Sustainable Standards Board (ISSB)	Global	January 2024
California Climate Corporate Accountability Act	California, US	January 2024
Sustainability Disclosure Regulation	UK	June 2024
Corporate Sustainability Reporting Directive	EU	January 2026

TION DESCRIPTION AND HOW QUINBROOK IS PREPARING

Listed and large-scale companies will commence ISSB reporting from 2024 as regulations are rolled out to 2025. These sustainability disclosures will better inform investors of material and decision-useful climate and sustainability data relevant to their investments. Quinbrook has worked to prepare to report to investors and across its own operations as required

This state law would require businesses to report their GHG emissions across all scopes, which Quinbrook portfolio companies already do

The UK's anti-greenwashing rules for financial markets. Quinbrook is ensuring its sustainability disclosures cover SDR requirements

The CSRD will require companies to disclose sustainability information relating to their business model and strategy, policies, risks, targets, and due diligence. Quinbrook are working to ensure investee companies have the data, processes, and people in place to comply in their company-level reporting

SCIENCE-BASED NET ZERO TARGETS AND PATHWAYS

In 2023, Quinbrook began setting science-based net zero targets and pathways for portfolio companies based on recently published guidance for the infrastructure asset class from the Institutional Investors Group on Climate Change (IIGCC).

The IIGCC's Net Zero Investment Framework (NZIF) categorises companies as either 'net zero', 'aligned', 'aligning', or 'unaligned'. The Framework is shown in the table on the following page and sets out the criteria which determine an entity's alignment status under the NZIF. Importantly, 'net zero' requires an entity to have emissions below a 1.5°C benchmark scenario which is projected to achieve net zero by 2050. As an example, Primergy's net zero strategy and target setting is informed by a 1.5°C benchmark scenario provided by the Science Based Targets Initiative ('SBTi'). The Power sector benchmark was used as it is sector specific to Primergy. The SBTi provides a net zero scenario in both absolute emissions and emissions intensity. The following figure shows the emissions intensity for the power sector to reach net zero by 2050.

IIGCC Net Zero Investment Framework Alignment Criteria

С	RITERIA	NET ZERO
1.	Long-term goal for the asset to be net zero emissions by 2050 or sooner	
2.	Short-and-medium term targets for scope 1, 2 and material scope 3 emissions in line with science based 'net zero' pathway. These may be absolute or intensity based:	
	 A) Where available a sectoral decarbonisation/carbon budget approach should be used 	
	 B) Minimum for other assets is a global or regional average pathway 	
3.	Current and forecast emissions performance (Scope 1, 2 and material Scope 3) relative to target or net-zero benchmark/pathway or an assets' science-based target	Asset with a intensity rec sector and r pathway for
4.	Disclosure of Scope 1, and 2 emissions and material scope 3 in line with regulatory requirements where applicable or PCAF	
5.	Development and implementation of a quantified plan setting out a decarbonisation strategy for scope 1, 2 and material scope 3	

6. Governance/management responsibility for targets/decarbonisation plan





	ALIGNED	ALIGNING
	Х	Х
	Х	Х
n emissions quired by the regional 2050	х	Compile/disclose or Criteria 1, 2, 4 and 6
	Х	Х
	Х	
	х	Х

Emissions intensity for the power sector to reach net zero by 2050 in the SBTi 1.5°C scenario



Below summarises Primergy's short-term alignment status under the NZIF, as well as highlighting the impact and additionality of its infrastructure development, which is a key part of the NZIF due to the IIGCC's emphasis on investment in climate solutions.

Primergy alignment with NZIF, 2023-2030

	CURRENT (2023)	2027	2030
% Alignment with	n IIGCC Net Zero Investn	nent Framework	
% Aligning	0%	0%	0%
% Aligned	100%	0%	0%
% Net Zero	0%	100%	100%
Description	As Primergy constructs additional green infrastructure, its greenfield assets will be 'aligned' to the NZIF.	By 2027, Primergy is forecast to have achieved a 79% reduction on its baseline emissions. As Primergy's forecast decarbonisation is greater than the the 42% reduction required by the SBTi 1.5C benchmark scenario, the platform is 'net zero' under the PAII NZIF.	In 2030, Primergy is forecast to have decarbonised by 98% on its baseline emissions. The SBTi benchmark scenario requires a 68% reduction by 2030 to be 1.5C - aligned. Therefore, the platform is 'net zero' under the PAII NZIF.
Impact and Addit	ionality		
MW operational solar and storage	20	1,873	2,373
MW under development	1,009	5,930	5,430
tCO ₂ e avoided (12 months)	29,210	444,033	426,693

REPORTING AND TRANSPARENCY

Aligned with TCFD best-practice, Quinbrook provides Fund specific scenario analysis, climate risk assessment and metrics. These are available to investors alongside Fund financial reporting.

Quinbrook's portfolios have been constructed with the aim of seeking opportunity in the energy transition, being resilient, well-positioned, and adaptable to future climate scenarios and changing policies.

This is targeted through investment in direct renewable energy generation, storage to provide enabling services to the transition, grid services, energy efficiency measures, and other decarbonisation or climate solutions provided to hard-to-abate sectors, or related technology. It may also include transition assets.

Overall, the Manager believes that new climate policy and rapid renewable growth scenarios would be overall positive for the portfolio: driving increasing demand for the purchase of renewable energy through a proliferation of increased purchase commitments, especially from corporate buyers; increasing renewable power demand to substitute carbon intensive supply source; and heightening the critical need for more flexible, grid balancing and storage infrastructure to support accelerated decarbonisation.

Climate scenario analysis has been undertaken across the portfolio by both the manager internally and supported by external analysis undertaken by KPMG, considering Quinbrook's climate risks and opportunities against two temperature pathways, 1.5°C Paris aligned and 4°C (business as usual). Overall outcomes of the portfolio-wide climate risk and opportunity assessment conclude that there is opportunity and potential value uplift under a 1.5°C Paris-aligned versus 4°C scenario.



RISK	POTENTIAL IMPACT	RISK
Transition Risks: Portfo benefiting from increas	lio companies are overall expected to experience potential upside in a 1.5°C scenario, ed demand due to their position in markets expected to grow through energy transition	Physical Ri of platform
Carbon pricing	The adverse effect of carbon pricing is limited due to most assets being renewables or storage assets with negligible associated emissions rates. Data Centre projects may be impacted by higher carbon pricing in electricity costs, however, these are expected to be passed on to the data centre tenant where contracts for energy provision are completed. Construction is expected to conclude within three to four years, reducing exposure to core risks such as steel, transport, and silicon carbon pricing	Similarly, n impacting o on geograp Extreme heat/cold
Changes in gas prices	Projects such as data centres that may rely to some extent or for a period of time on grid or gas are exposed to changes in gas prices, led by carbon, geopolitical, or other supply impacts	
Decarbonisation of grids	This is seen as a primary opportunity for all assets in the Fund, through growth in demand for renewables assets as well as grid support services, which data centres may also play a role and which is central to the strategy of solar and storage investment. Decarbonisation of grids would provide greater access to renewables by data centres	Flood or sea level ri
Changes in wholesale power prices	Power price exposures relate to power pricing, as well as overall capacity driven by decarbonisation relative to renewable or other low carbon power supply. For the majority of assets in the Fund, a 1.5°C scenario would see benefits to revenue through increased pricing. Similarly, for data centres, there may be opportunity for higher pricing of carbon-free energy provided to tenants under supply agreements due to increasing competition and appetite	Extreme w and weathe
Changes to price of raw materials and water	Changes in price of raw materials will have capex impacts across all asset types. Solar and battery storage assets are most exposed due to the high capex requirement of silicon and steel in solar assets; and the exposure of battery storage assets to the availability of particular critical minerals and metals. Although a significant proportion of Quinbrook's portfolio carries exposure to steel and silicon pricing, this exposure is expected to conclude by 2024 and therefore limited in long-term climate-related price impacts. Water pricing is discussed in physical impacts below	Water supp

Physical Risks: None of the portfolio assets were identified to have a high risk (measured as impacting over 1% of platform value) of physical climate hazards to their asset value. The inclusion of physical risk consideration in Quinbrook's investment decisions has led to an assessment of low or heavily mitigated physical risk exposures. Similarly, none of the platforms within the portfolio have been identified as having potentially high risk (measured as mpacting over 1% of platform revenue) of business interruption, such as site failure due to a climatic event based on geography and typography

Extreme heat/cold	Disruption to asset output or revenu interruption. All assets are at risk an measures in the portfolio include ec safety risk, and protective measures emptive risk mitigation includes con responding to the impacts of the Te risks were incorporated into the ter the Temple Phase I site
Flood or sea level rise	Assets located close to water bodies to sustained or flash flooding. Exam project site planning away from floo assessment and forecasting, and en potential risk
Extreme wind and weather	Extreme wind or hailstorms could at supporting infrastructure. Mitigatior minimise delivery risk beyond the Fi siting of assets or equipment shut d
Water supply	Water is a key consumable in some data centres. Assets in the portfolio local communities and biodiversity, including low water usage solar pane measures, and the support of local requirements for solar assets remain production from coal or nuclear por consideration for data centres and v alternative supply arrangements, co

POTENTIAL IMPACT

ues due to extreme heat or cold and business and subject to assessment. Examples of mitigation quipment selection (assessing performance, fire and s), insurance assessment, and cost forecasts. Prentractual arrangements, such as those put in place exas Freeze in 2020 in Quinbrook's LCPF. Interruption rms of the provision of energy supply to the tenant of

es, near coastal regions, or low-lying areas prone aples of mitigation and resilience measures include od areas, significant flood assessment, insurance cost agineering and foundation work completed to reflect

ffect assets directly or indirectly through disruption of n measures include contractual protections of assets to fund's control, solar asset hail protection measures, and down to seek to reduce risk of extreme wind or weather

assets of the portfolio, including for solar panels and o have included assessment of water stress impacts on and implemented risk and stress mitigation measures, els, water supply agreements, water collection communities providing potable water sources. Water n significantly less for the portfolio than for equivalent ower assets. Water supply risk is a central risk and where future water stress is assessed Rowan seeks onservation, and other measures

ALIGNING CLIMATE, RESILIENCE AND VALUE

Quinbrook provides investors with regular emissions and climate reporting, alongside financial accounts.

Assets also may build in climate risks into the underlying valuation models, factoring in, for example, insurance costs, equipment costs to facilitate extreme climate conditions, contracting agreements, supply adjustments to mitigate areas of concern such as water stress, or carbon pricing in electricity or green credit markets.

The below is an outline of the data presented to investors, capturing avoided emissions, and Scope 1-3 emissions. This is assessed both for the current reporting period and across the asset lives.

	SCOPE 1 AND 2 (tCO ₂ e)			
	METRIC 1: ABSOLUTE EMISSIONS (1)			
	Scope 1			
	Scope 2 (Market-based)			
	Scope 2 (Location-based)			
	Total Scope 1 + 2 (Market-based)			
SCOPE 1	Total Scope 1 + 2 (Location-based)			
AND 2	Carbon Offsets			
	METRIC 2: EMISSIONS INTENSITY METRIC (EXCLUDES AVOIDED EMISSIONS AND USES MARKET-BASED INDIRECT EMISSIONS)			
	Scope 1-2 Carbon Footprint	tCO ₂ e per USDm inve		
	Scope 1-2 Weighted Average Carbon Intensity (WACI)	tCO₂e per USDm rev		
	Scope 1-2 Energy Intensity	tCO₂e per MWh		
	SCOPE 1, 2 AND 3 (tCO ₂ e)			
	METRIC 1: ABSOLUTE EMISSIONS (1)			
	Scope 3			
	Scope 1-3 Total Emissions (Market-based)			
SCOPE 1	Scope 1-3 Total Emissions (Location-based)			
2, AND 3	METRIC 2: EMISSIONS INTENSITY METRIC (EXCLUDES AVOIDED EMISSIONS AND USES MARKET-BASED INDIRECT EMISSIONS)			
	Scope 1-3 Carbon Footprint	tCO ₂ e per USDm inve		
	Scope 1-3 WACI	tCO₂e per USDm rev		
	Scope 1-3 Energy Intensity	tCO₂e per MWh		
	AVOIDED EMISSIONS ('SCOPE 4') (tCO ₂ e)			
	Estimated avoided emissions created by the portfolio			
	METRIC 3: DATA QUALITY ¹			
	PCAF Data Quality Score: Estimated 100% of scope 1 and 2 emissions are Score 2 & 3 on PCAF Data Quality Score table as they use physical activity-based emissions.			
	TCFD Data Quality Metric: 100% of Fund's Scope 1, 2, and 3 emissions are Reported. This means that reported emissions have been calculated in line with the GHG Protoco without verification by a third-party.			
	METRIC 4: PARIS ALIGNMENT			
	100% of assets (by value) are encompassed within Quinbrook's public AUM wide targets (Paris-aligned to reach net zero by 2040). No portfolio companies have individual targets at this stage.			

¹ Score 2 defined under: 2a Outstanding amount in the company and EVIC are known and/or 1b Outstanding amount in the company and EVIC are known. Unverified emissions calculated by the company are available, based on The Global GHG Accounting and Reporting Standard for the Financial Industry standards.

Disclaimer

There is no guarantee that Quinbrook will successfully implement and make investments that create positive climate impacts while enhancing long-term value and achieving financial returns. The act of selecting and evaluating material factors is subjective by nature, and there is no guarantee that the criteria utilised or judgment exercised by Quinbrook will reflect the beliefs or values, internal policies or preferred practices of any particular limited partner or other asset managers or reflect market trends.

There can be no assurance that the material climate topics and data covered in this document is exhaustive and additional topics may be identified as material by Quinbrook on an investment-by investment basis in the future.

This document contains forward-looking statements which are based on Quinbrook's current beliefs and expectations and are subject to substantial risks and uncertainties.

Forward-looking statements speak only as of the date on which they are made, and Quinbrook assumes no obligation to update or revise any forward-looking statements or other information contained herein, whether as a result of new information, future events or otherwise. Certain information contained herein relating to goals, targets, intentions, or expectations, including with respect to certain targets and related timelines, is subject to change, and no assurance can be given that such goals, targets, intentions, or expectations will be met. Further, statistics and metrics relating to climate and ESG matters may be estimates and subject to assumptions or developing standards (including Quinbrook's internal standards and policies).

Case studies presented herein have been selected in order to for illustrative purposes only. References to these particular portfolio companies should not be considered a recommendation of any particular security, investment, or portfolio company or be used as an indication of the current or future performance of Quinbrook's investments. Future investments may vary from those contained in this document. In gathering and reporting upon the information contained herein, Quinbrook may depend on data, analysis, or recommendations provided by its portfolio companies.