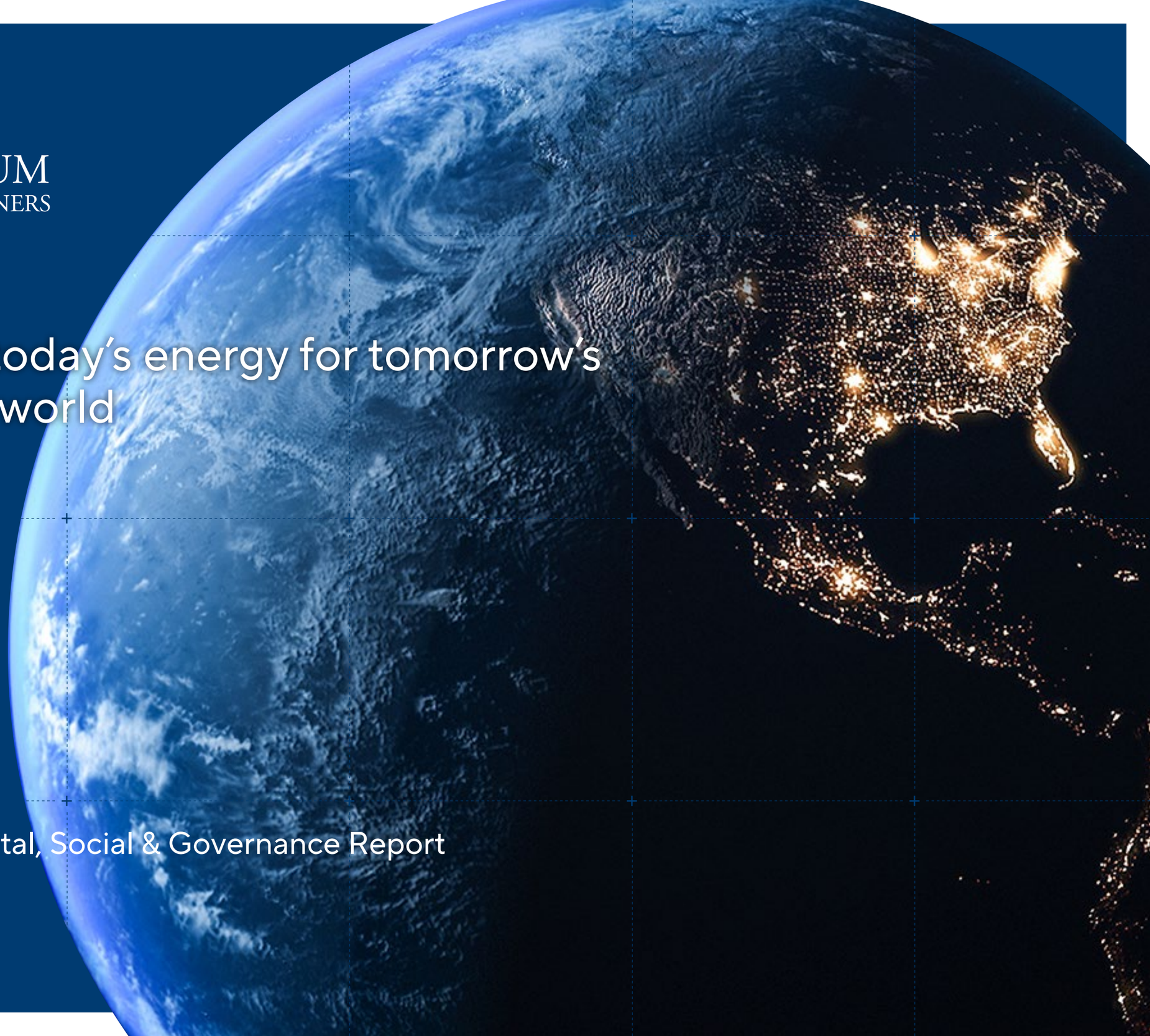
QUANTUM
ENERGY PARTNERS

Advancing today's energy for tomorrow's sustainable world

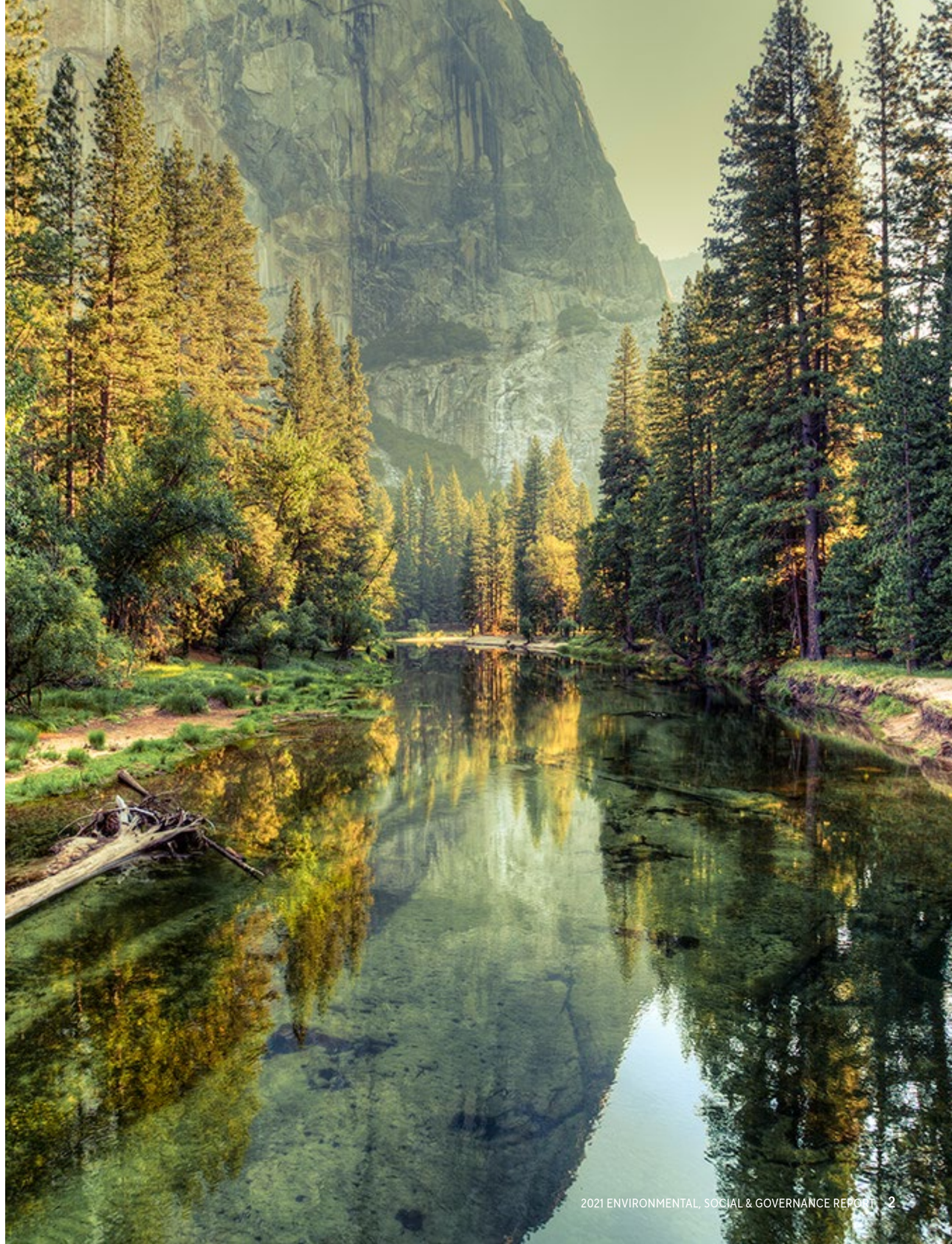


2022 Environmental, Social & Governance Report

Contents

Use of Forward Looking Statements:

Certain information contained in this document constitutes "forward-looking statements" which can be identified by the use of forward-looking terminology such as "may," "will," "should," "expect," "anticipate," "target," "project," "estimate," "intend," "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. The forward-looking statements contained in this presentation are based on assumptions believed to be reasonable in light of the information presently available. Actual events or results or actual performance may differ materially from those reflected or contemplated in such forward-looking statements due to various risks and uncertainties, many of which are beyond the control of Quantum. No assurance, representation or warranty is made by any person that any of such forward-looking statements will be achieved and no person should rely on such statements. None of Quantum, any of its affiliates or any of their respective directors, officers, employees, partners, shareholders, advisors or agents makes any assurance, representation or warranty as to the accuracy of any of such forward-looking statements. Recipients of this presentation should carefully review the assumptions underlying any such forward-looking statements.



Creating Together

A Letter from Quantum's Founder & CEO, Wil VanLoh

Dear Stakeholders,

Our world has experienced historic and transformative challenges over the past few years. The impacts have penetrated every aspect of our lives and served as a humble reminder that resiliency in the face of turbulence and uncertainty is vital to stability and meaningful progress. It is also more apparent than ever that access to affordable, abundant, reliable and environmentally and socially-conscious energy is critical to enhancing personal prosperity, ensuring national security and protecting the health and welfare of people everywhere.

At Quantum, we are proud to play a role in responsibly providing the energy that makes human progress possible, while achieving superior risk-adjusted returns for our investors. We are a leading provider of private capital through the responsibly-sourced energy, energy transition and decarbonization sectors – what we call the *Sustainable Energy Ecosystem*, and our focus on environmental, social and governance (ESG) principles has been at the core of our business philosophy since our inception almost 25 years ago. As you will see throughout the pages of this inaugural sustainability report, we seek to integrate ESG into our cycle-tested investment approach and use it as a lens to identify new opportunities and innovative ways of thinking.

Responsibly Meeting the World's Energy Demand

Energy demand is directly correlated with the number of people in the world and their standards of living. There are 8 billion people on earth today, and nearly 3 billion live in energy poverty. The United Nations predicts that the global population will increase to approximately 10 billion and 11 billion by 2050 and 2100, respectively. Population growth and socioeconomic shifts of billions of people into the middle class and billions more out of energy poverty implies that global energy demand will continue to increase meaningfully this century. Meeting this continuous growth in energy demand while reducing emissions and mitigating climate change is a monumental challenge that will require unprecedented levels of global coordination, innovation and capital investment.

Todays' geopolitical and economic realities, as well as the heightened focus on realizing equitable outcomes, suggest that achieving a low-carbon economy is going to require all forms of energy, including oil and natural gas, for some period into the future. This means that we must continue to produce those resources in a way that is environmentally responsible and protects people and communities, while simultaneously investing in decarbonization, low-carbon energy sources and technologies that have the potential to transform the energy landscape as we know it.

Responsible Investing

The International Energy Agency (IEA) estimates that the world will invest more than $100 trillion over the next three decades to facilitate the transition to a lower-carbon future, creating one of the largest investment opportunities in history.

At Quantum, we believe we are positioned for long-term, sustainable success. We are focused on highly-attractive market opportunities across the *Sustainable Energy Ecosystem* that have the potential for significant disruption, profitable growth and the ability to deliver meaningful social and environmental outcomes. Our investment strategy has been tested and refined through multiple commodity, market and technology cycles, and is based on the preservation of capital and a relentless focus on identifying, analyzing, pricing and managing risks.

By systematically integrating ESG into our investment process, from pre-acquisition due diligence through exit, we believe we further enhance the resiliency of our portfolio. As an active owner and operator, we devote significant time, resources and expertise to our operating partners, using our cross-disciplinary team of experts to provide strategic insights and accelerate ESG progress with a persistent focus on capturing opportunities and mitigating risks, ultimately driving long-term value creation.

Our ESG Progress

As you will see throughout this report, in 2021, we continued to increase our investment exposure to companies that are significantly contributing to the *Sustainable Energy Ecosystem*. We also progressed our long-standing ESG program, with a focus on expanding our ESG performance metrics, working with our portfolio companies to implement emissions reduction strategies, and creating more diverse teams and integrating ESG performance into compensation plans for executives. We also engaged with a third-party expert to assess our portfolio's emissions, conduct a climate scenario analysis and align our disclosures with the Task Force for Climate-Related Financial Disclosures (TCFD) reporting criteria. Further, we continue to collaborate with peers and climate groups to advance and accelerate emissions reduction efforts across the energy industry, with a focus on using private capital levers in ways that create positive change and help advance sustainable solutions.

Looking Ahead

We are focused on being responsible stewards of our investors' capital, as well as the environment and the communities where we operate. We recognize that the size of our global platform and breadth of our influence create unique responsibilities and valuable opportunities. As I tell everyone who joins the Quantum team, it is imperative to remember who we work for – hard-working teachers, first responders, public servants and so many others who depend on us to manage and grow their retirement funds, endowments or investment pools so they can look forward to a secure retirement or ensure they have the funds to further their organization's mission.

"At Quantum, we are proud to play a role in responsibly providing the energy that makes human progress possible, while achieving superior risk-adjusted returns for our investors."

We believe our investments across the *Sustainable Energy Ecosystem* and our integrated and comprehensive ESG program give us a distinct competitive advantage and enable us to continue generating attractive risk-adjusted returns while responsibly advancing today's energy for tomorrow's low-carbon world. While 2021 was a year of significant progress for us, our work and commitments continue into 2022 and beyond. We will continue to push ourselves, our industry and our portfolio companies to produce energy responsibly, while developing solutions to reduce emissions and address climate change risks.

I know that our progress would not be possible without the steadfast dedication of the employees at Quantum and our portfolio companies who passionately drive our collective success every day. I am thankful for their efforts, and for the many partners we have on this important journey. We welcome your input and feedback and appreciate your continued support and trust.

Thank you,

Wil VanLoh
Founder and CEO

Quantum At-A-Glance

$19BN+
Commitments under stewardship since inception*

$800MM
General partner and affiliate commitments since inception

8
Flagship funds raised since 1998

120+
Portfolio companies since inception

5,000+
Employees across the Quantum family**

* Represents committed capital from partners since inception through Quantum Energy Partners I–VIII, affiliated co-investment funds, select direct co-investment, QLCP and affiliated co-investment fund and Quantum Resources.

** Includes Quantum and companies where Quantum Funds have a material ownership interest.

How We Are Distinct

PIONEERS IN ENERGY PRIVATE EQUITY

Quantum was one of the first energy private equity firms. For almost a quarter century, we have focused on supporting energy entrepreneurs.

CRITICAL OPERATING AND TECHNICAL EXPERTISE

We have significant experience, both financial and operational, investing across the entire *Sustainable Energy Ecosystem* with many of our staff having direct operating and technical experience in the areas we invest.

DIVERSE ENERGY INVESTMENTS

We invest across the *Sustainable Energy Ecosystem* value chain and capital structure which enables us to capture synergies and insights not available to parties focused on a limited aspect of the energy ecosystem.

VALUE-ADDED PARTNERS

We take a selective approach to ensure we can stay highly engaged in all the investments we make. We invest in our internal capabilities to be more value-added to the companies with which we partner.

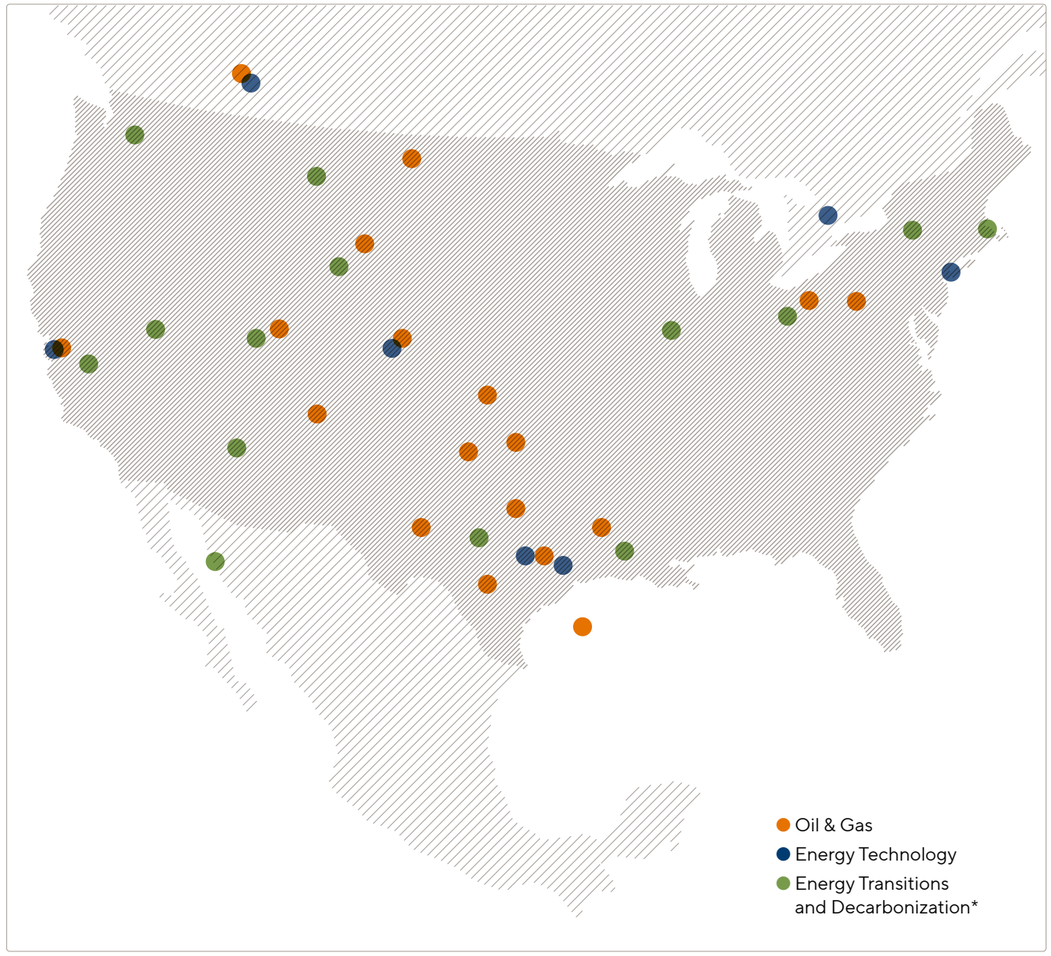
HARNESSING THE POWER OF TECHNOLOGY

Quantum has built and continues to refine a next-generation digital platform for the energy and sustainability industries to harness the power of data and software to make better business decisions.

RESPONSIBLE INVESTING

From strong ESG stewardship to various philanthropic endeavors in the communities in which we operate, we are committed to making the world a better place.

Our Geographic Footprint



* Please refer to page 48 for additional details regarding global energy transitions and decarbonization.

About Quantum

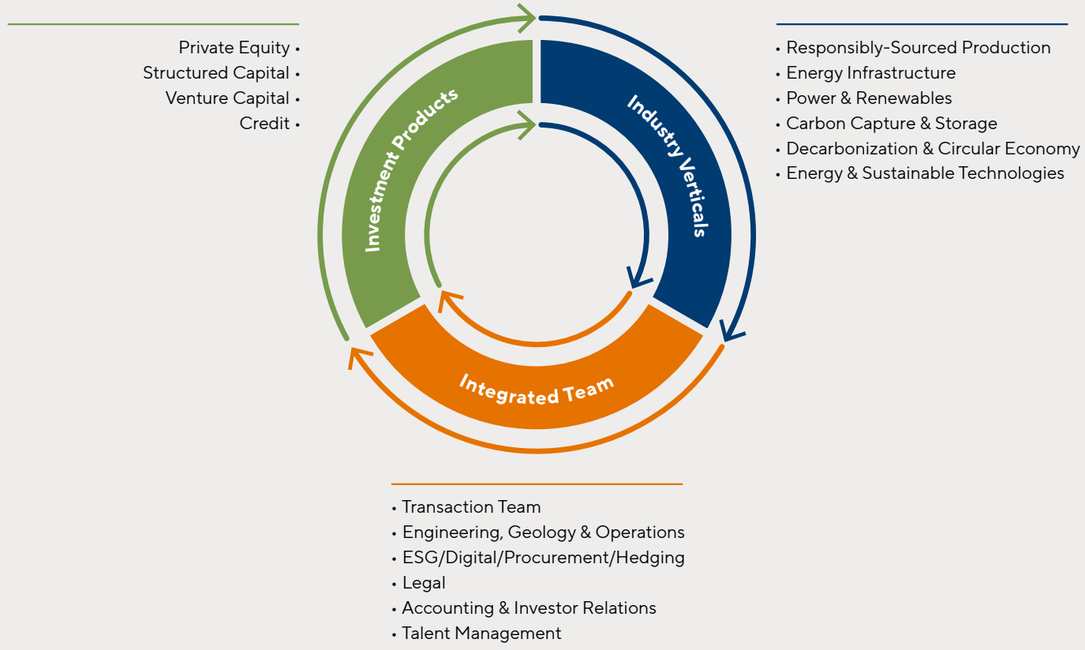
Founded in 1998, Quantum is a leading provider of private capital to the *Sustainable Energy Ecosystem*. Together with our affiliates, we have stewarded over $19 billion in capital commitments to more than 120 portfolio companies since our inception.

We are more than a global investment firm; we are a partner for progress. Our team has deep experience investing across the energy value chain and capital structure, allowing us to meet today's biggest energy challenges with discipline and agility. We are entrepreneurs first, with a long-term vision and a collaborative mindset. Through our high-tech and data-driven approach, strong commitment to ESG and vast industry expertise, we are setting the standard for energy excellence.

Our Investment Platform

We are focused on advancing today's energy for tomorrow's world. We recognize that solving the world's urgent energy challenges will require new ways of thinking. We have developed a platform of investment strategies across private equity, credit, structured capital and venture capital to take advantage of the wide variety of opportunities within the *Sustainable Energy Ecosystem*. We invest strategically across the capital structure in companies that we believe are critical to energy security and affordability and to a future low-carbon economy. Our ESG integration strategy applies to all our investments regardless of its sector or place in the capital structure. This integrated approach provides us with unique insights and synergies in advancing the key building blocks of the *Sustainable Energy Ecosystem*.

Integrated Approach to Investing and ESG Implementation



Quantum's integrated investing and ESG approach provides us with distinct insights and synergies across the *Sustainable Energy Ecosystem*.

- Quantum embraces a "one-firm" mentality to investing across the energy value chain.
- We believe the broad perspectives and experience we gain across industry verticals and investment products differentiate us from other investors pursuing decarbonization and growth investments in energy.
- We approach deal origination, diligence, ESG and stewardship collectively as a firm.
- Market insights that we develop through one particular investment or strategy inform decisions that we make across the firm.
- The integration across our team results in significant efficiencies and keeps members of the organization accountable for our performance.

2021 ESG Highlights

GOALS

Established Five Operational Scope 1 Reduction Targets for Portfolio Companies

- Methane Emissions
- Direct Measurement
- Flaring
- CO_2 Combustion Emissions
- Scope 2 Emissions

Align executive compensation to ESG performance

Due Diligence

Process includes screening guidance per industry vertical

Organizations we commit to:

ESG Data Convergence Initiative

ilpa INSTITUTIONAL LIMITED PARTNERS ASSOCIATION

PRI Principles for Responsible Investment

Climate Risk Assessment & Climate Scenario Analysis

with support from ERM

✓ ✓ ✓ ✓

Performance Reporting Programs

Annual

22	34	4K+
companies participated	KPIs	data points collected

Quarterly

Standardized ESG content presented in quarterly board meetings

100%

100% acknowledgment of compliance with Quantum's anti-discrimination, anti-harassment, anti-retaliation policy

Cybersecurity

Achieved NIST certification attestation

Committed to implement Project Canary methane detection sensors on over 500 high-production wells

500+

Global Energy Perspective

GLOBAL ENERGY PERSPECTIVE

Solving the Dual Challenge

The Importance of Energy

Humankind has made incredible progress over the last century, but it is increasingly clear that much of this growth and expansion has impacted the environment. Today, the world faces a generation-defining dual challenge – continuing to meet growing energy demand with affordable and reliable energy, while also reducing humanity's impact on the climate. Recent events in Europe that shed light on the geopolitical importance of energy have made that monumental challenge more complex.

Since 1990, global energy demand has increased by over 60% as the world's population increased from 5 to 8 billion people. By 2050, the global population is expected to grow by nearly 2 billion people (approximately 23%) with a burgeoning middle class predicted to expand by ~1.3 billion people. As a result, significantly more energy – approximately 47% – is expected to be required by 2050 to support this population growth and the greater consumption patterns associated with middle class lifestyles.

Today, 2.5 billion people are without access to clean cooking fuels and 760 million people do not have access to electricity[7], and they predominantly reside in developing countries. These developing countries, particularly those in Asia and Africa, will not only see a disproportionate amount of population growth this century, but they are expected to grow their gross domestic product (GDP) faster than developed nations. While today these countries have the lowest energy consumption per capita, that will undoubtedly change as economic output rises. And, as GDP and energy consumption continue to grow, global living standards will continue to rise, resulting in access to better medical care, nutrition, and education. Humankind's relentless drive to achieve these quality-of-life improvements will lead to increased global energy demand for most of this century.

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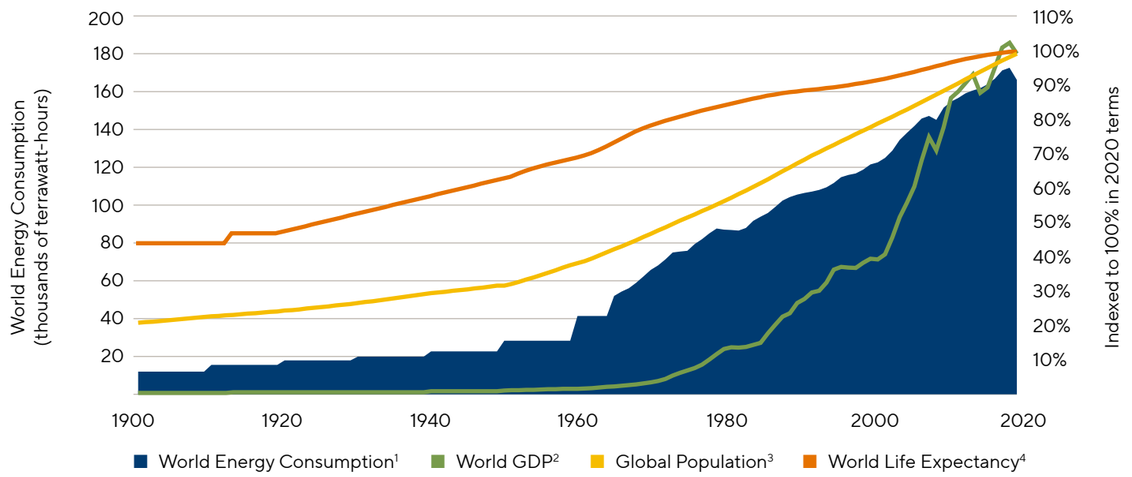
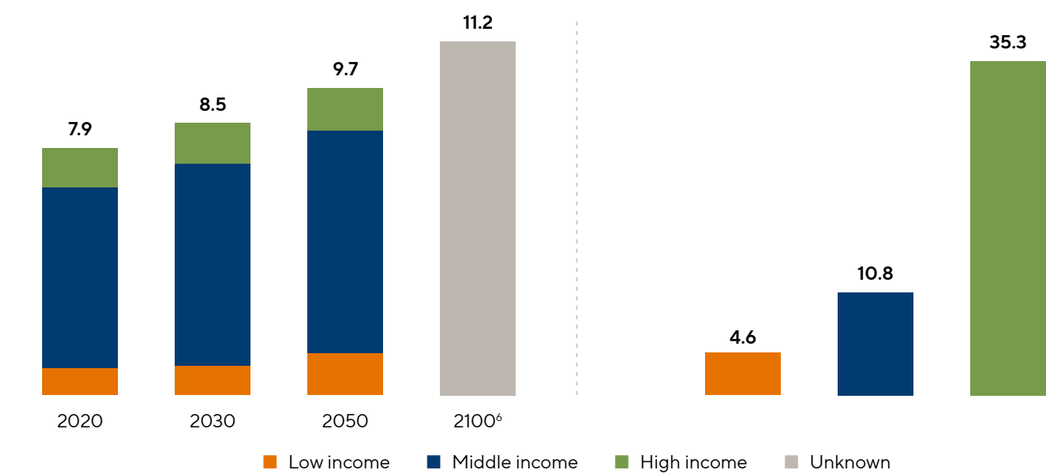
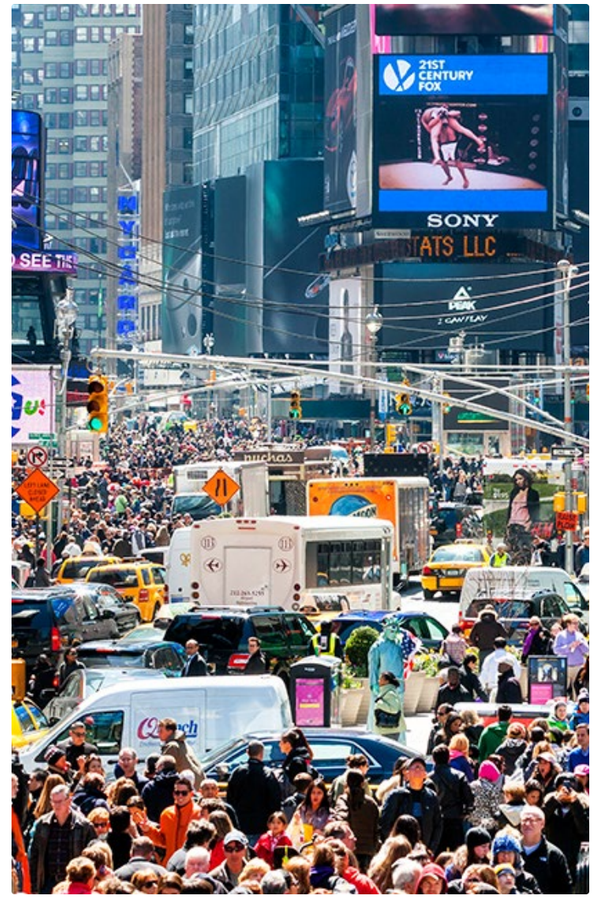
Energy has played a critical role in driving economic growth and extending life expectancy



The world's population is continuing to grow...
World population (billions)[5]

...and billions seek to use more energy to improve their quality of life
Average energy use per income group (BOE per capita)[5]





1 Our World in Data based on Vaclav Smil (2017) and BP Statistical Review of World Energy (2021).

2 World Bank National Accounts Data (accessed September 2022) & Maddison (2017).

3 UN, Department of Economic and Social Affairs, Population Division (2022).

4 Our World in Data based on Max Roser, Esteban Ortiz-Ospina and Hannah Ritchie (2013).

5 The World Bank DataBank. Low income, middle income and high income designations based on World Bank Country Classifications as of July 2020.

6 Population in 2100: UN World Population Prospects.

7 IEA World Energy Outlook; SDG7 data and projections.

GLOBAL ENERGY PERSPECTIVE

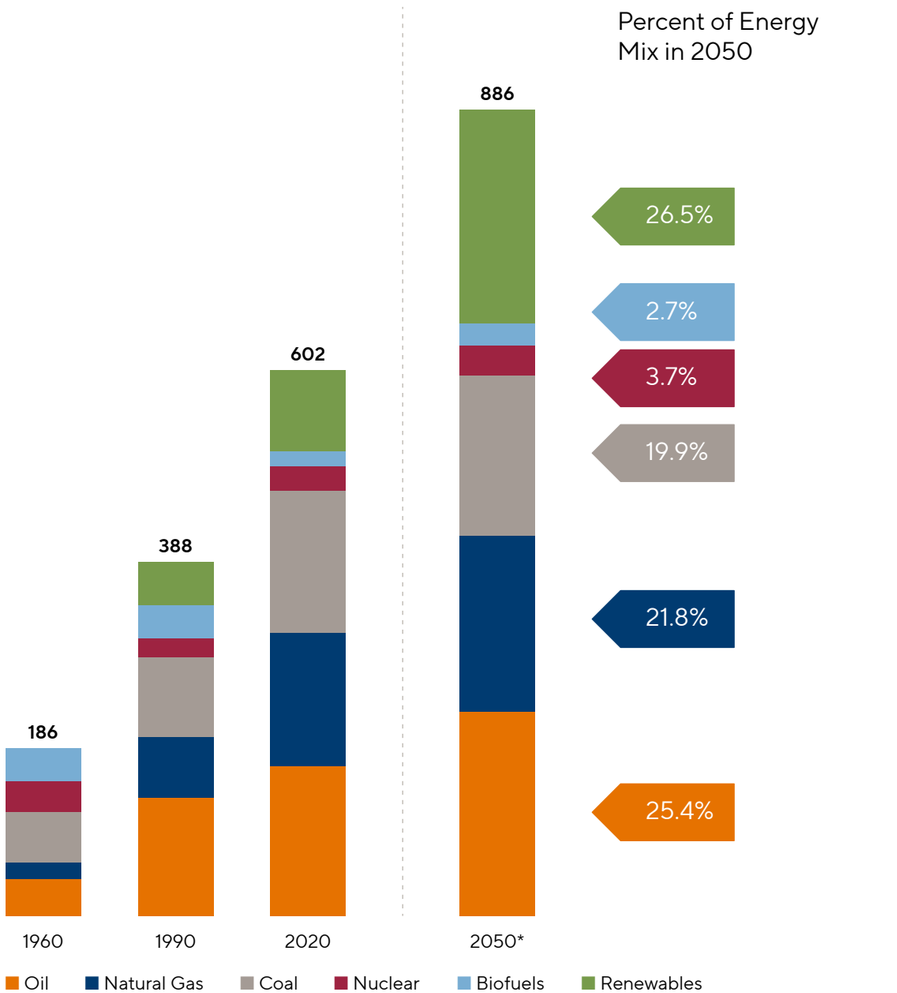
Solving the Dual Challenge *continued*

The Modern ESG Challenge – Dueling Objectives of "E" and "S"

Access to low-cost, abundant, reliable energy allows countries to prosper and is critical for billions of people to potentially escape energy poverty and improve their quality of life. However, increased energy use results in additional emissions and there is currently not a readily available replacement for the 80% of global energy that is supplied by fossil fuels today. At current global emission and energy consumption levels, it is estimated that the world will surpass key ceiling targets of 1.5 degrees of warming by 2032 and 2.0 degrees of warming by 2055. Therefore, we must find a way to significantly reduce emissions without impairing the availability of low-cost, reliable energy.

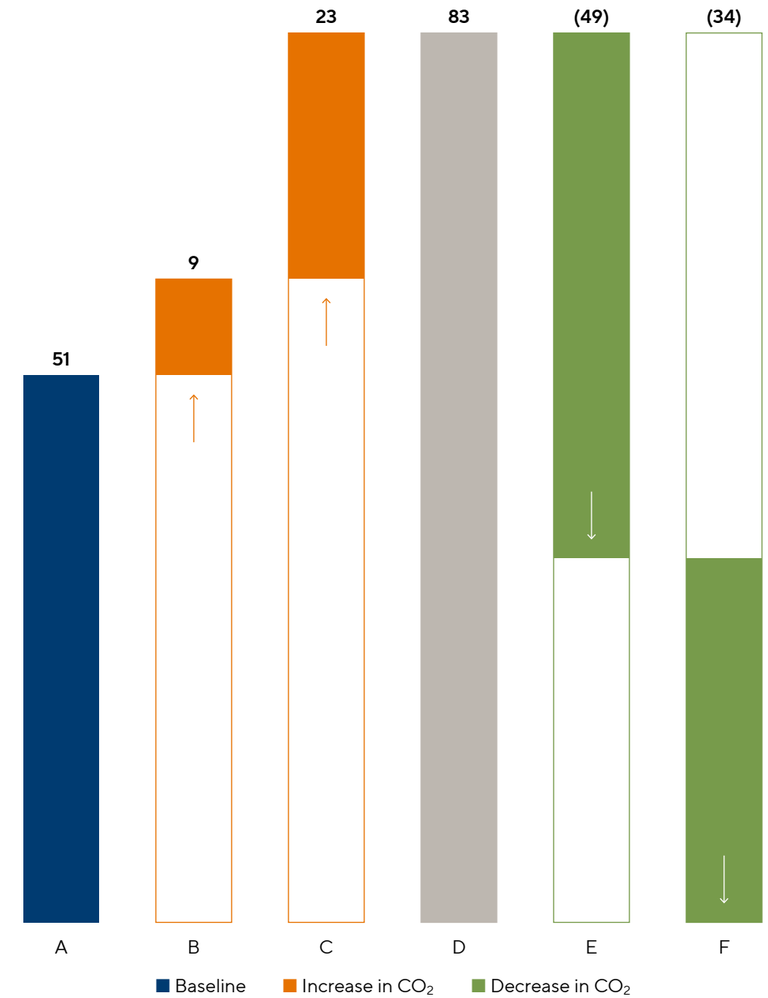
Massive new investments in renewable power generation and transmission are critical elements of the global decarbonization effort. The IEA estimates a successful energy transition will require over $100 trillion of capital and many decades to complete. In the interim, the development of environmentally and socially conscious energy production and carbon capture and storage will be required at a global scale. Ultimately, a successful and equitable transition will require an unprecedented amount of global coordination, regulation, technological advancements and supply chain development.

Global Energy Consumption[1]
Q BTU



* Projections

Illustrative annual CO_2e emissions in 2050[2]
Gigatons



A Baseline in 2020
B Rising Population
C Economic Development
D 2050 (without intervention)
E Limit to 2.0°C by 2050
F Limit to 1.5°C by 2050

1 (EIA) International Energy Outlook 2021

2 Bloomberg, NEF Energy Transition Investment Themes, Thunder Said Energy, McKinsey, Bill Gates' How to Avoid a Climate Disaster (2021).

GLOBAL ENERGY PERSPECTIVE

Sustainable Energy Ecosystem

Quantum's investments across the *Sustainable Energy Ecosystem* help overcome the dual challenge of meeting increased energy demand while reducing greenhouse gas (GHG) emissions and climate impacts.

Responsibly-Sourced Production

For 25 years, Quantum's approach to energy investing has been centered around partnerships with leading execution-centric teams. Quantum has consistently followed a proven investment strategy that has embedded ESG practices throughout the investment life cycle, which has enabled us to achieve industry leading operational, environmental and financial results. We call this the Responsibly-Sourced Production (RSP) element of our current and future portfolios. RSP will remain a critical element of Quantum's investment strategy.

Energy Transition & Decarbonization

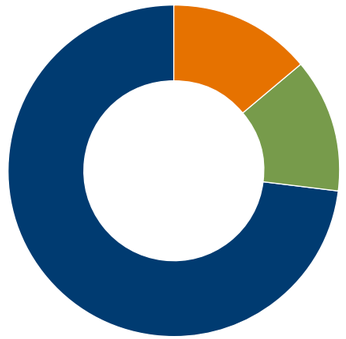
In addition, we are committed to expanding our investments across the following sectors: Energy Infrastructure, Power & Renewables; Carbon Capture & Storage (CCS), Decarbonization & the Circular Economy, and Energy & Sustainability Technologies. We refer to these sectors collectively as Energy Transition and Decarbonization (ET&D).

By investing across the *Sustainable Energy Ecosystem*, Quantum can partner with a broad array of businesses that are providing products and services that are essential to decarbonize oil and gas production and to develop the zero-carbon energy sources needed to support global electrification and decarbonization. Our current portfolio of ET&D investments include:

- **Growth Equity in ET&D:** 547 Energy (547) is the renewable power development platform of Quantum Energy Partners. 547 is developing a global portfolio of wind, solar, offshore wind, floating solar, green hydrogen and power storage assets. 547 employs over 200 people and has a development pipeline of over 60,000 megawatts.
- **Venture Capital in ET&D:** Since 2017, Quantum has invested in venture capital opportunities focused on sustainability, electrification and decarbonization technologies through the Quantum Innovation Fund (QIF). Our QIF investments cover environmental protection and reporting, energy efficiency and cybersecurity software platforms and proprietary data and analytical tools for customers in both hydrocarbons and the renewable sectors. While the strategies and maturities of these businesses vary, Quantum believes each has the potential to meaningfully support growth and decarbonization strategies across the *Sustainable Energy Ecosystem*.

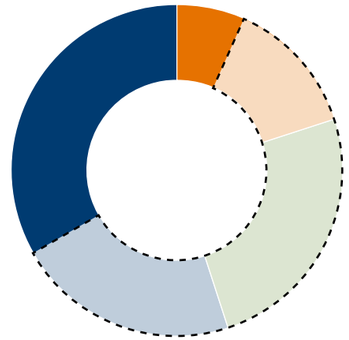
Quantum Current and Potential Future Investment Mix

Quantum VII Investment Mix
Actual



- Energy Infrastructure **14%**
- ET&D **13%**
- Upstream **73%**

Quantum VIII Potential Investment Mix



- Energy Infrastructure **20%**
- ET&D **20–30%**
- Upstream **50–60%**

60% to 70% of capital allocated to zero and low-carbon investments. All investments will align with Quantum's ESG principles.

Highlights of Quantum's Transition Investments

RENEWABLE ENERGY

BlueFloat Energy · neton Power · Third Pillar Solar · 547 Energy · ConnectGEN · ENTEKA · CleanArc Data Centers · Aer Soléir

SUSTAINABILITY AND DECARBONIZATION TECHNOLOGIES

chargepoint · Project Canary · DATAGRATION · ORENNIA · BeZero · Carbon Direct · RECURVE · Heirloom · POWER FACTORS · FigBytes · Mexico Pacific

Climate Change

CLIMATE CHANGE

Climate Strategy

Advancements in data and insights provide pathways for analyzing and predicting the interrelated impacts of energy demand and climate change. We are focused on continuously improving our insights while developing strategies that will make our investments and our portfolio companies more resilient to a wide array of potential climate scenarios.

Our climate strategy is our framework for mitigating risks and identifying and capturing new growth opportunities in the *Sustainable Energy Ecosystem*, and it focuses on three main tenets:

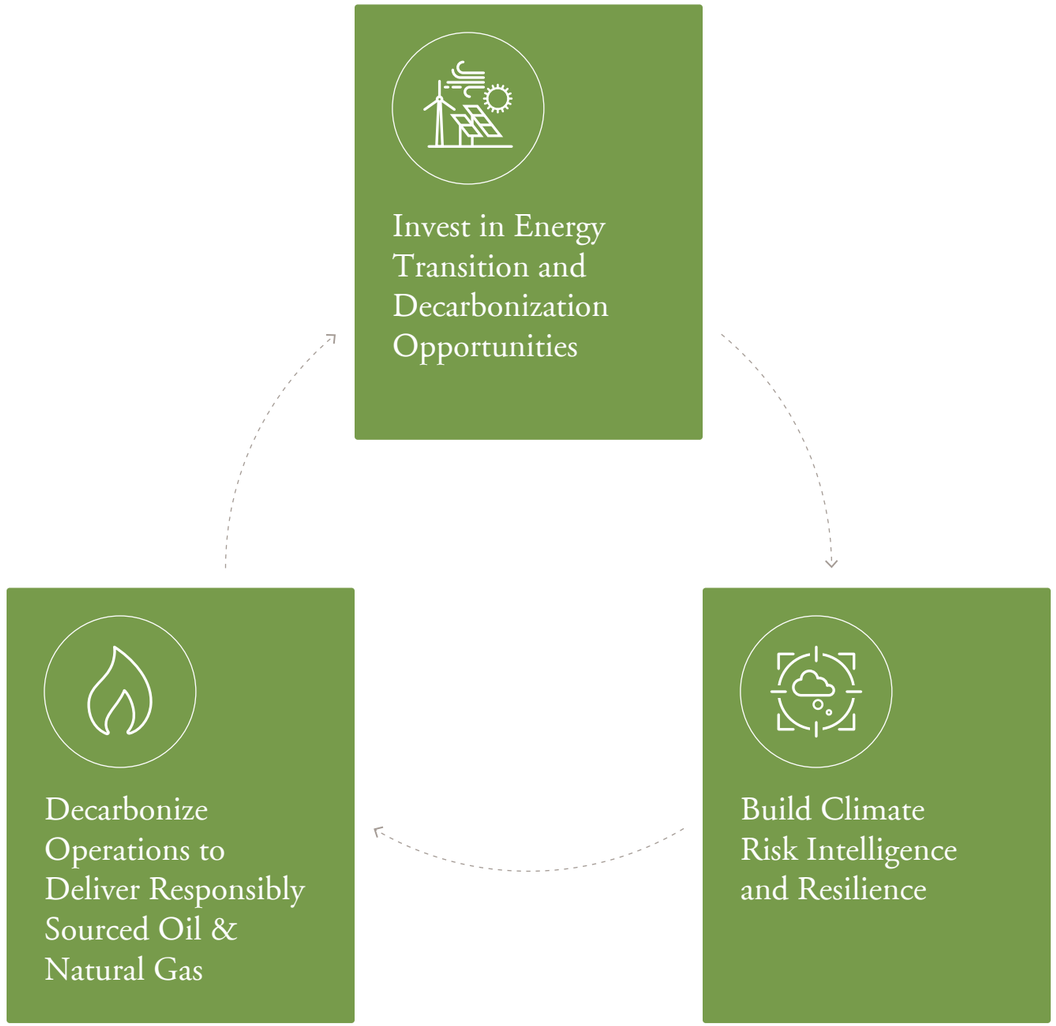
- **Helping our portfolio companies decarbonize operations and deliver responsibly-produced products**
  By helping our portfolio companies increase their climate transition resilience, we ultimately build better businesses and deliver better results, supporting them in capturing transition-related opportunities where they exist.
- **Investing in decarbonization companies and services through our ET&D platform**
  As we further expand our portfolio of equity and credit investments with companies that facilitate the energy value chain's decarbonization and transition, we intend to evolve our portfolio toward a lower GHG footprint while simultaneously helping to meet society's growing energy needs.
- **Building strategic climate risk intelligence**
  Acknowledging that climate change science is complex and dynamic, we strive to continuously improve our data capture and analysis to better understand the climate risks and opportunities of our investments.

To expand the scope of our climate strategy, in 2021 we engaged with globally recognized sustainability consultant ERM to:

- Assess the possibility of enhancing Quantum's climate strategy and developing operational goals for our portfolio companies in alignment with two climate scenarios leading to 1.5 degrees and 2.0 degrees of warming
- Calculate the emissions footprint of our portfolio, using a 2020 baseline
- Evaluate the physical risks of three portfolio companies that are geographically representative of future investments
- Identify representative transitional risks and opportunities utilizing two climate scenarios

The results of our engagement are summarized throughout this section and will continue to influence the implementation of our investment strategy and our portfolio stewardship.

Quantum's Climate Strategy



CLIMATE CHANGE

Climate Goals

Based on our portfolio emissions footprint (see page 30), we have developed five operational goals for our portfolio companies to help manage and reduce Scope 1 and 2 emissions. With guidance from ERM, we evaluated highly respected, publicly available guidance and analyses to develop targets that align with ambitious climate scenarios and programs. These goals are drawn from industry and stakeholder best practice guidance, including the IEA, Environmental Defense Fund, Oil and Gas Climate Initiative (OGCI) and the Oil and Gas Methane Partnership (OGMP).

Quantum has elected to establish goals for Scope 1 and 2 emissions only and is not setting a comprehensive Scope 3 target at this time. Quantum will focus on opportunities within the *Sustainable Energy Ecosystem* that support the energy transition and contribute to reductions in Scope 3 emissions. Please refer to the discussion below regarding alignment with SDS and NZE.

In addition to the goals outlined above, we have implemented measurement, monitoring and reporting practices to enhance our understanding of baselines and opportunities for improvement over our holding period. We work closely with our portfolio companies to provide them with resources and guidance for implementing practices aimed at mitigating and avoiding emissions.

1 Methane Emissions

Considering that in 2021 only 24% of our Scope 1 portfolio emissions consisted of methane emissions and that some of our portfolio companies already have low absolute methane emissions, which could make percentage reductions financially or technically unfeasible, Quantum recommends the below aspirational methane intensity caps to our portfolio companies:

- **Intensity Cap Recommendation for Production Segment:** Aim to achieve or maintain a methane intensity below 0.20%*
- **Intensity Cap Recommendation for Midstream Segment:** Aim to achieve or maintain a methane intensity below 0.024%*

2 Direct Measurement

Direct detection of methane leaks results in more accurate methane emissions data and allows operators to quickly identify problems and implement leak reduction strategies. Hence, Quantum recommends that portfolio companies:

- Implement direct detection and measurement of methane emissions using on-the-ground direct measurement and continuous monitoring sensors

3 Flaring

In line with the World Bank Zero Routine Flaring Initiative adopted by many leading oil and gas companies, Quantum recommends that portfolio companies:

- End routine flaring by 2030
- Aim to keep flaring intensity (percent of produced gas that is flared) below 1% in line with the IEA's Net Zero Emissions by 2050 Scenario (NZE)

4 CO_2 Emissions from Fuel Consumption

In 2021, 76% of our portfolio Scope 1 emissions came from combustion sources, including drilling, fracturing operations, compressors and steam generators. Hence, in alignment with reductions required under the IEA's Sustainable Development Scenario (SDS) and NZE, Quantum recommends that portfolio companies:

- Strive to reduce CO_2 emissions from fuel combustion in operations by 50% by 2030

5 Scope 2 Emissions

In alignment with recommendations drawn from Science Based Targets Initiative's (SBTi) Corporate Net Zero Standard, Quantum recommends that portfolio companies:

- Strive to procure 100% renewable electricity by 2030
- Where renewable electricity is not available, use Renewable Energy Credits (RECs), in alignment with GHG Protocol Offsetting Guidance, by 2030

* Methane intensity is calculated as methane emissions allocated to the natural gas value chain divided by methane throughput, following the approach established by the Natural Gas Sustainability Initiative (NGSI) Methane Intensity Protocol.

CLIMATE CHANGE

Scenario Analysis

We believe the analysis of climate scenarios is a critical step in shaping a science-based climate strategy, stress testing the resiliency of our portfolio, and developing climate targets and commitments. We designed our analysis, identified climate risks and opportunities and developed our climate goals based on the IEA's SDS and NZE scenarios, which are internationally recognized climate scenarios and not unique to Quantum.

The SDS is a theoretical future scenario framework that uses assumptions and estimates to highlight central elements that reflect the Paris Agreement's goals to (i) keep global temperature rise by 2050 to well below 2 degrees (above pre-industrial levels), and (ii) motivate additional global efforts to limit the temperature increase to as low as 1.5 degrees. While global CO_2 emissions in the SDS are projected to reach net zero by 2070, the IEA highlights that oil and natural gas will still account for approximately 46% of global energy supply in 2035. This confirms the need for continued global investment in both Responsibly-Sourced Production and associated carbon capture and storage technology, as well as renewable power and transmission.

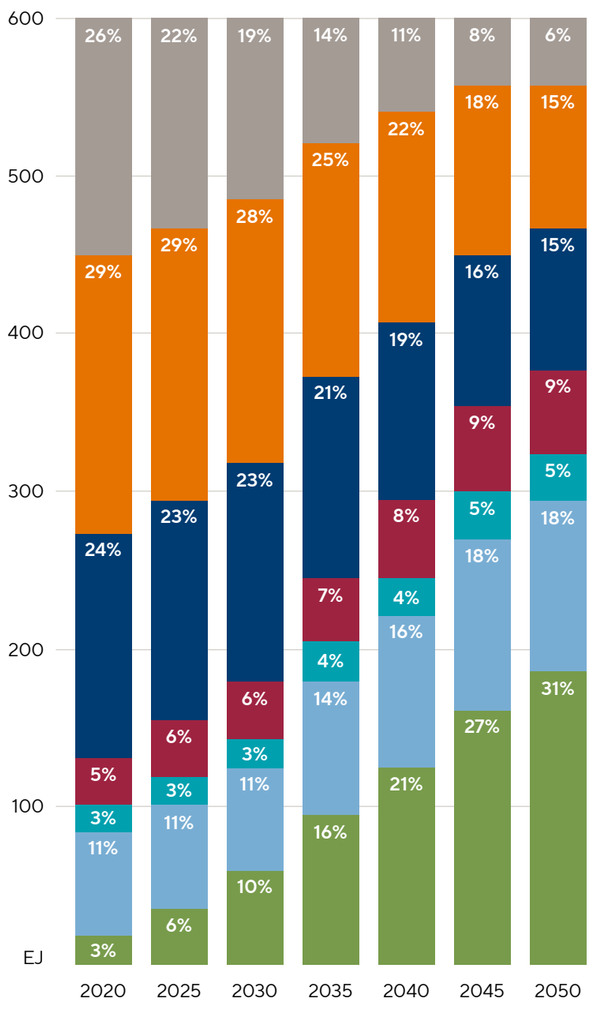
The NZE is another theoretical future scenario that is more ambitious than SDS and shows a narrower pathway to achieve net zero emissions by 2050. The NZE scenario is highly dependent on several factors including: (i) the timing and emergence of new technologies and innovations, (ii) widespread societal behavior changes and (iii) unprecedented global cooperation and policy changes. This scenario assumes that oil and gas will still account for 19% of global energy supply by 2050.

Fully aligning with the pace of change called for in these low-carbon scenarios means that energy production companies, and the financial institutions invested in those companies, must account for Scope 3 emissions, which are those associated with the combustion of fuel by end-use emissions. Scope 3 emissions are particularly challenging for the oil and gas industry as the IEA scenarios project fundamental changes to regional and global energy systems, primarily a significant decline in hydrocarbon demand, which conflicts with widely accepted current and forecasted hydrocarbon demand for 2030, 2040 and 2050, and global energy needs, as discussed on page 8. Hence, our climate resilience strategy focuses on our efforts to reduce the operational emissions of our portfolio and address Scope 3 emissions by investing in companies that will support the energy transition.

<2°C

Sustainable Development Scenario (SDS)

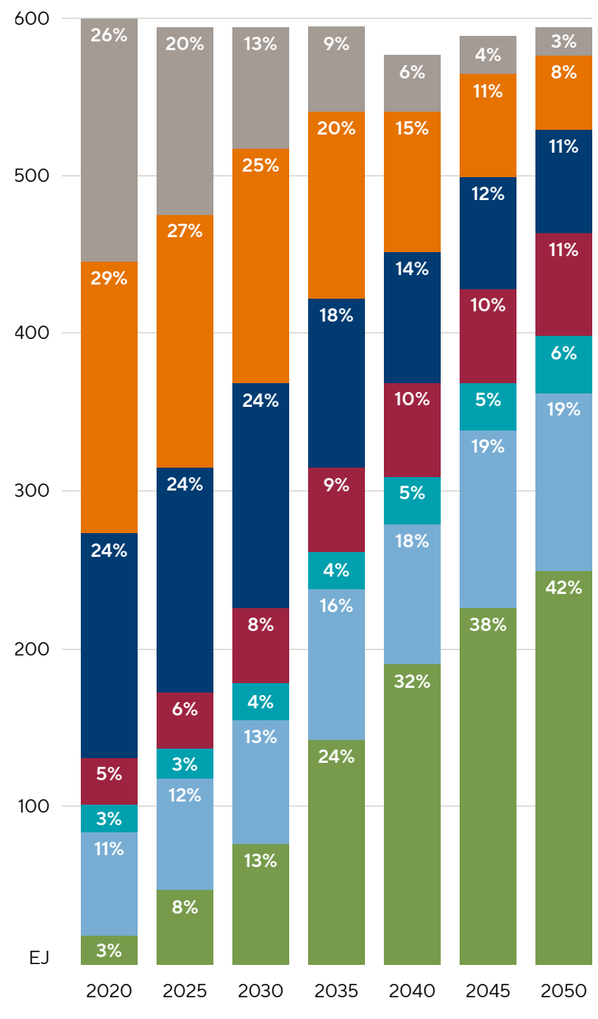
SDS Energy Mix 2020–2050
Exajoule (EJ), Percent



1.5°C

Net Zero by 2050 (NZE)

NZE Energy Mix 2020–2050
Exajoule (EJ), Percent



Source: IEA

CLIMATE CHANGE

Climate Risk Management

Transitional Risks and Opportunities

In alignment with TCFD recommendations, we evaluated the climate-related transitional risks and opportunities of our investments under the IEA's U.S. SDS assumptions, which follows the best practice of aligning scenarios with a company's geographic scope of investments or operations to the extent possible. Our evaluation of risks and opportunities under the SDS assumptions is focused on six types of investments that are part of our current portfolio or potential areas of investment, including upstream oil and gas production, oil and gas midstream, liquefied natural gas (LNG) export, electric vehicle charging, wind and solar and carbon capture. The risks and opportunities are analyzed through the lens of three main influences:

- **Market and Technology:** This category includes changes in demand and the uncertainty related to the financial viability and adoption of emerging technologies.
- **Regulatory and Legal:** This category covers policies and rules that may both restrict and incentivize specific forms of energy, technologies and business models.
- **Reputational:** This category relates to potential challenges around attracting investment in specific sectors or types of assets.

Quantum's Analyzed Investment Types

We have taken several steps toward working with our upstream and midstream companies to reduce their climate risks and enhance opportunities (refer to the section starting on page 32), and we are evaluating the feasibility and practicality of further aligning with low-carbon scenarios. Additionally, we will continuously seek to expand our position in low-carbon energy transition and decarbonization investments that address the risks and opportunities outlined on the following page.

Physical Risks

We conducted a pilot physical risk assessment on three geographically representative portfolio companies. Two of these companies are in the U.S. and represent locations where our investments in responsibly-sourced energy opportunities are likely to grow, and the third is in a location that represents the closest proximity to sea level.

For each of the three assets, an analysis was conducted using data to generate indicators related to climate change that affect physical assets, consistent with the newly released Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report (AR6) and considering both an optimistic scenario where global temperatures are held below 2.0 degrees warming by 2100, and a pessimistic scenario where global temperatures are held below 4.0 degrees warming by 2100.

PHASE 1: HAZARD SCREENING

This phase included a calculation of future changes in climate hazards, which accounted for past and projected physical risks across the following hazard categories: extreme heat, cold stress, extreme rainfall, drought stress, water stress, flooding, hurricanes, landslides and wildfires.

PHASE 2: ASSET EXPOSURE

This phase included determining climate-related risks for each asset; data from screening was matched with financial and historical information about each site to determine criticality and vulnerability.

PHASE 3: FINANCIAL RISK

This phase included a calculation of future financial risks from climate events utilizing financial and historical data and resulting in a range of estimates of potential damages, losses and business interruptions from climate hazards.

We plan to refine and expand upon our initial physical risk assessment to evaluate material physical risks and opportunities for current and future assets.

CLIMATE CHANGE

Climate Risk Management *continued*

Transitional Risks and Opportunities

Risk	Oil and Gas: Midstream, Upstream and LNG	New Technology: Carbon Capture and Electric Vehicle Charging	Renewables: Wind and Solar Projects
▶ MARKET AND TECHNOLOGY	Though both scenarios (NZE and SDS) show that oil and natural gas will continue to play an important part of the global energy mix, they indicate a decrease for natural gas and oil demand in the market. They also indicate that the imposition of a carbon cost will increase operating costs and pass down increased costs to customers, which could lead to a further decline in demand. However, energy demand has historically proven to be relatively inelastic, and if that trend continues, demand may not decrease.	Multiple technologies and approaches for these elements are being developed. It is not clear which approaches will be favored or widely adopted. Investments in technologies, business models or geographic locations that are not ultimately favored by the market may be at risk.	Overbuild of renewable resources or market structures may lead to oversupply of renewable energy in specific regions. Additionally, these sectors face supply chain risks, as raw material availability may be limited due to significant increases in wind and solar development. Resource constraints for rare-earth minerals required for renewable technologies could restrict development.
▶ REGULATORY AND LEGAL	Regulation of GHGs from oil and gas operations may require investments in control technologies and mitigation practices to achieve compliance, raising operational costs.	Federal and state policies are expected to play a role in the continued development of new technology and renewable energy projects, but there is uncertainty over their ultimate impacts. For example: • Electric vehicle charging regulations are evolving, and providers may need to modify existing practices to comply with changing requirements. • Carbon capture policies and regulations may evolve in a manner that do not support certain technologies or approaches. • Solar and wind project policies may support different methods to renewable deployment and state-specific factors may lead to geographic variability.	
▶ REPUTATIONAL	If the industry is not able to successfully implement large-scale carbon capture, investors may have a negative perception of the oil and gas industry due to its carbon footprint.	Analysis found little reputational risk associated with carbon capture, electric vehicle charging, solar or wind projects.	
▶ OPPORTUNITY	**Low-cost, low-GHG natural gas will be attractive to international markets.** • End-use sectors are increasingly interested in natural gas with lower life cycle emissions. • Global carbon capture and storage demand is expected to rise in order to decarbonize the oil and gas industry. • Global LNG demand is expected to rise as natural gas is used to displace higher-carbon fuels around the world. **Emissions from traditional oil and gas operations yield opportunities for new energy investments. For example:** • Hydrogen production is expected to rise, and significant volumes of hydrogen may be produced from natural gas using carbon capture (i.e., blue hydrogen). • Oil and gas production and pipeline companies may be able to leverage expertise to support carbon capture and build pipelines to transport CO_2.	Investor demand for opportunities that support the low-carbon energy transition are rising. For example: • Electric vehicle adoption is estimated to increase significantly and will make up about 50% of sales in 2030. • Carbon capture technologies are required to meet climate targets, with the amount of carbon captured projected to increase 7x by 2030. • Wind and solar generation are forecasted to represent 43% and 73% of total U.S. power generation by 2030 and 2050, respectively. Federal and state policies are expected to play a role in continued development of low- and zero-carbon technologies and projects and will present opportunities for investments that are supported by policies and incentives.	

Integrated ESG Program

Integrated ESG Program

At Quantum, we believe that the sustainability and success of our portfolio are closely tied to the well-being of the environment and communities in which we live and invest. This belief drives our commitment to integrate ESG throughout the life cycle of our investments and portfolio company engagement to the extent we can understand the company performance of ESG factors and engage in stewarding their operations. We are committed to maintaining responsible practices and strive to reduce our environmental footprint, deepen our positive impacts on society and strengthen our corporate governance in every investment decision we make.

To accomplish this endeavor, we work closely with portfolio companies where we have operational control to help set expectations, guidelines and incentives, and to provide resources to incorporate, measure and manage ESG elements embedded in their operations.

Our ability to raise capital and continue supporting the growth of the businesses, their people and the communities they are a part of depends on our ability to adapt our practices and conform to global economic, social and environmental expectations. Our firm's dedicated ESG team, which is comprised of professionals with decades of experience in executing successful ESG programs, helps us and our portfolio companies adapt our ESG programs as stakeholders' needs and the overall ESG landscape evolves.

To set the vision and guide our firm's overarching ESG strategy, Quantum developed ESG Guiding Principles that serve as the anchor of our ESG program.

ESG Guiding Principles

- **Be accessible to and objective, consistent and fair with our stakeholders.**
- **Be active owners and incorporate ESG issues into our investment analysis and decision-making processes to encourage long-term sustainability and minimize risk.**
- **Utilize governance structures that provide appropriate oversight on disclosure and risk management, and minimize potential conflicts of interest.**
- **Implement incentive structures that align compensation and ESG performance at portfolio company management teams.**
- **Exhibit good business integrity and corporate citizenship; maintain a high degree of integrity and transparency in interactions with investors, communities, business partners and employees.**
- **Operate professionally in a performance-oriented culture and with a commitment to continuous improvement.**
- **Comply with applicable national, state and local regulations.**

Our ESG Policy Summary

Our ESG Guiding Principles feed into our ESG Policy, which informs our investment decisions and provides our portfolio companies with expectations regarding environmental protection, community support, social and ethical standards, corporate governance and reporting.

ENVIRONMENTAL STANDARDS

We believe that effective management of environmental impacts is linked to business success and long-term sustainable value. Our portfolio companies are expected to proactively manage the environmental footprint of their operations by implementing industry best practices and consistently evaluating and implementing new technologies. In addition, we expect our portfolio companies to implement appropriate risk management controls to monitor and minimize the impact of their operations on local communities and habitats.

SOCIAL STANDARDS

Our greatest asset is our human capital. Therefore, we see ethical human capital management as the foundation for future success. Providing a safe, diverse, equitable and inclusive workplace with opportunities for personal development nurtures and rewards talented people, and we strive to maintain this type of environment at Quantum and at our portfolio companies.

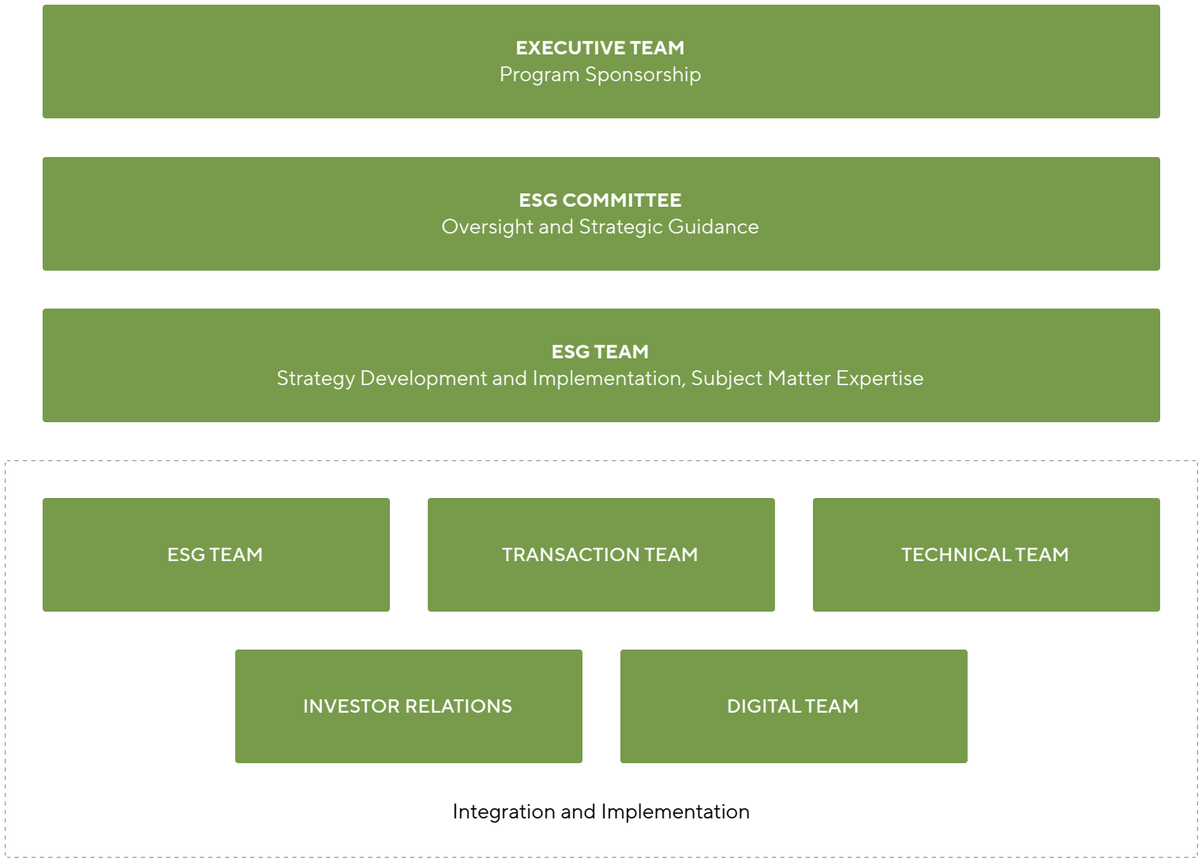
CORPORATE GOVERNANCE AND ETHICAL STANDARDS

At both Quantum and our portfolio companies, performing with the highest ethical standards of business conduct is a key competitive advantage and part of every employee's job expectations. When Quantum has Board representation at our portfolio companies, we direct each Board and management team to make decisions and execute business with the goal of maximizing integrity and value for stakeholders. We expect management to be transparent and disclose ESG performance in a way that creates opportunities for dialogue and drives continuous improvement, while respecting the privacy of our business partners, investors and various stakeholders.

INTEGRATED ESG PROGRAM

ESG Program Governance

To create a program that is aligned with our Principles and Policy, the Quantum Executive Team designed a governing structure to ensure that we have the resources in place to meet our ESG aspirations. As active investors and owners, we also work closely with our portfolio companies to encourage and implement strong governing structures and processes that are designed to foster regulatory compliance and strong oversight.



Executive Team

Quantum's Executive Team is responsible for the strategic commitment to integrate ESG throughout the organization. Our hands-on culture allows us to identify and manage ESG risks and opportunities in our investment process through shared accountability, with the goal of creating value for our investors.

ESG Steering Committee

Quantum's ESG Steering Committee provides oversight of ESG strategies and program management. The Committee is comprised of senior leadership and spearheaded by our head of ESG. The Committee has decades of combined experience implementing ESG programs and managing energy investments.

Portfolio Engagement and Board Representation

Quantum representatives on the Boards of Directors at our portfolio companies are responsible for motivating management to create policies and procedures to monitor compliance with the ESG priorities set forth by Quantum. We seek to educate our deal team members about key ESG considerations through firm-wide training, close collaboration with the ESG team and third-party consultants, as necessary. The Boards of Directors at our portfolio companies review and discuss ESG policies, initiatives and performance quarterly.

Sample of ESG Topics Covered during Portfolio Company Board Meetings:

1. Adoption of ESG initiatives and performance monitoring
2. Hiring practices and human capital management
3. Workplace safety and well-being
4. Corporate ethical standards and regulations
5. Community engagement
6. Environmental impacts
7. Adequacy of resources devoted to ESG issues

Stakeholder Engagement

Engaging with our stakeholders is critical to building and maintaining collaborative relationships. Our stakeholder engagement efforts help us understand different perspectives regarding the industry and our business, with the goal of prioritizing stakeholder needs and finding opportunities to integrate them in our investment life cycle. Our stakeholders include:

- The individuals and organizations who depend on returns from our investments
- Our partners that invest alongside us
- The portfolio companies in which we invest and their employees, customers and suppliers
- The communities where we and our portfolio companies operate
- Governments, regulators, supervisors and non-governmental organizations (NGOs)
- Quantum's employees

INTEGRATED ESG PROGRAM

Material ESG Factors

We have developed a comprehensive strategy and firmwide ESG priorities based on what we believe to be the most material ESG risks and opportunities intrinsic to the energy industry. We believe this approach not only helps us manage current and future risks but also creates new opportunities for growth and value creation.

The prioritized ESG factors serve as the lens through which we identify high-probability and high-impact material risks and opportunities for Quantum and its prospective portfolio companies. While numerous ESG factors can influence the performance of investments, we have reviewed, analyzed and selected the ESG factors proposed as material to the energy industry by leading international organizations, including the Sustainability Accounting Standards Board (SASB), TCFD, the Global Reporting Initiative (GRI), the International Petroleum Industry Environmental Conservation Association (IPIECA) and the International Association of Oil and Gas Producers (IOGP). We have also considered inputs from a range of stakeholders.

Following a rigorous analysis, we selected the following ESG factors. These factors translate into risk and opportunity filters that we apply throughout the entire investment life cycle. By managing material ESG factors, we believe we enhance the resilience of our portfolio in an evolving regulatory, environmental and social landscape.

Environmental

CLIMATE CHANGE

- GHG in operations (Scopes 1 & 2)
  - Methane
  - Flaring
  - Combustion
- GHG emissions from product (Scope 3)
- Climate resilience

NATURAL RESOURCES & RELEASES

- Biodiversity and habitat
- Air emissions
- Water consumption
- Wastewater
- Waste
- Spill prevention
- Well closure and site decommissioning

Social

HUMAN CAPITAL

- Health and safety
- Labor standards and human rights
- Asset integrity and process safety
- Diversity, equity and inclusion (DE&I)

COMMUNITY RELATIONS

- Community engagement
- Indigenous people and first nation rights
- Land acquisition, use and resettlement

Governance

CORPORATE GOVERNANCE & ETHICS

- ESG performance monitoring, evaluation and reporting
- Stakeholder engagement
- Business ethics and code of conduct
- Cybersecurity
- Executive incentives tied to ESG performance

INTEGRATED ESG PROGRAM

ESG Integration Strategy

Our strategy focuses on ESG integration, including explicit inclusion of quantitative and qualitative inputs in our investment analysis and decisions, and using a holistic approach where material ESG factors are identified, assessed, and managed.

We believe the management of material ESG risks and opportunities, from investment decision to exit, produces operational efficiency and productivity, enhances our sustainability and creates tangible and intangible value for our shareholders. We work diligently to continuously improve our processes and procedures to drive understanding, measurement, monitoring and improvement of our ESG factors throughout the deal life cycle.

DEAL LIFE CYCLE

Deal Sourcing → **Due Diligence** → **Investment Decision** → **Ownership & Stewardship** → **Exit**

ESG INTEGRATION

INPUTS

Qualitative

- Societal megatrends
- Stakeholder engagement
- Regulatory landscape
- Market scan
- Technology reviews

Quantitative

- Material ESG factors
- Risk assessments
- Scenario analysis
- Risk ratings
- Liabilities

ASSET LEVEL STEWARDSHIP

Monitoring & Evaluation

- Reporting
- Goals
- KPIs
- Roadmaps

Implementation Support

- Engagement
- Best practices
- Tools and resources
- Training and awareness

Risk Mitigation and Continuous Improvement

- Subsector and asset-specific measures

FINANCIAL INTEGRATION

- Cost benefit analysis
- Growth rate adjustment
- Discount rate adjustment
- Portfolio ESG performance

ESG IMPLEMENTATION ACTIVITIES

- Identify industry-specific factors
- Screen for alignment with Quantum's vision and values
- Identify and size material ESG risks
- Incorporate findings in the investment memorandum
- Evaluate valuation impact of ESG performance
- Onboarding management
- Formulate roadmap
- Monitor and evaluate ESG performance
- ESG topics on Board of Directors' agenda
- Leverage ESG expertise and experience across portfolio
- Provide tools and resources to monitor and improve ESG practices
- Conduct third-party verification
- Report ESG performance to limited partners
- Company valuation considers ESG performance
- Support preparation of credible ESG materials for exit
- Potentially attract buyers for whom good ESG performance would be a priority

EXPECTED OUTPUTS

Opportunities
Innovation and long-term business success

Risk Reduction
Reduced costs and exposure to regulatory thresholds

Investor Relations
Performance reporting, engagement and communication

Thought Leadership
Energy sector ESG leader

Legacy
- Long-term investment opportunities
- Build future underlying conditions

INTEGRATED ESG PROGRAM

Deal Sourcing, Due Diligence & Investment Decisions

During this phase, we consider material ESG risks and opportunities, review compliance with applicable regulations and evaluate the adequacy of the company's management practices to understand how any proposed ESG improvements fit with the business plan and the fund's view of the company's likely future profitability.

Objectives

Assess the ESG risks and opportunities of the proposed investment to allow Quantum's Investment Committee to make an informed decision considering: (1) ESG factors; and (2) the company's or management team's capacity to address risks and capitalize on opportunities.

Process

Quantum's ESG team works side by side with the investment team to conduct due diligence. We continuously enhance our ESG screening process and develop new tools for the investment team to utilize as they evaluate opportunities.

Activities

1 SCOPING

Define the boundaries of the due diligence

2 ASSESS MANAGEMENT TEAM

Evaluate management team's capacity, commitment and track record regarding ESG matters

3 DESKTOP REVIEW

Execute a detailed review of key ESG documents and assess the company's ESG history

4 PLAN AND CONDUCT SITE VISIT

Where appropriate, visit facilities to gain further understanding of operations and associated risks

5 THIRD-PARTY ENGAGEMENT

Assess the need for third-party engagement and where appropriate, involve external consultants with sound technical or geographic knowledge and expertise to assist with the due diligence process

6 DEVELOP ESG ACTION PLAN

- Quantum and the prospective business discuss findings from the desktop review and identify ESG risks, gaps and any limitations on the diligence process, including key assumptions and potential unknowns
- After Quantum and the company prioritize ESG focus areas, the company develops a detailed improvement plan of ESG practices to address them

7 ENSURE INFLUENCE AND OVERSIGHT

- Consider how the proposed ESG improvements fit with the business plan, and evaluate opportunities to add value by improving ESG performance
- Gauge ability to maintain influence and oversight on ESG matters going forward

8 FINALIZE DUE DILIGENCE REPORTS

- Review and file all due diligence documentation, findings and action plans
- Summarize findings for Quantum's Investment Committee

Intended Outcomes

Record of ESG due diligence process

ESG action plan(s)

Summary of findings for the Investment Committee

INTEGRATED ESG PROGRAM

Ownership & Stewardship

During the investment period, Quantum focuses on portfolio stewardship, which allows us to identify opportunities to actively minimize risks and execute on ESG opportunities. During the exit phase, we are focused on linking a company's ESG performance to improved value creation.

Objectives

- Guide or assist the company's ongoing compliance with applicable standards, implementation of the ESG action plan and continuous improvement of ESG performance, including ESG-driven value creation initiatives
- Proactively manage ESG factors and pursue ESG-related opportunities
- Stay informed and respond to new developments and/or risks relevant to the company's ESG performance
- Regularly measure, monitor and evaluate ESG performance through Quantum's robust reporting program

Process

We work closely with each company to help implement critical ESG initiatives that we believe will create tangible value and provide benefits to our stakeholders. During this process, we seek to be a helpful resource, offering strategic insights and creating a platform for shared intelligence and learning.

Activities

BUILD ON ESTABLISHED RELATIONSHIP

Fostering an open and trusting partnership between Quantum and the portfolio company is key to building value in the company

DISCUSS KEY INITIATIVES EARLY

- Establish governance mechanisms for ESG
- Revisit ESG due diligence findings
- Discuss the monitoring process and key performance indicators

REGULARLY MONITOR, OVERSEE AND PROVIDE SUPPORT ON KEY ESG MATTERS

- Engage with companies to discuss ESG matters
- Review information provided in quarterly Board reports
- Conduct periodic assessments of the companies' ESG performance and ESG action plan implementation
- Conduct site visits
- Engage with consultants, where appropriate, for special projects

RESPOND TO UNPLANNED EVENTS

- Implement mechanisms that allow for rapid and appropriate response to serious incidents (e.g., fatalities, property damage, or other changes in the company's circumstances) to ensure that lessons are learned and applied in the future
- Ensure that serious incidents are reported to various bodies (e.g., the company's Board, Quantum, limited partners, regulators)

PREPARE FOR EXIT

- Seek to maximize the contribution that strong ESG performance can make on an investment
- Potentially attract buyers for whom strong ESG performance is a priority
- Prepare credible ESG materials for exit
- Help mitigate post-exit reputational risks

Intended Outcomes

Quantum's appropriate oversight of each company's ESG performance

The company's compliance with Quantum's ESG policies and related standards

Greater value of each company and good stakeholder relations

Prompt and effective response to unplanned events

Strong ESG performance

INTEGRATED ESG PROGRAM

Portfolio Monitoring, Evaluation & Reporting

Our portfolio-controlled companies strive to regularly measure, monitor, evaluate and report on their ESG improvements and challenges. The successful implementation of our ESG program requires us to collect comprehensive data across our portfolio. High-quality data underpins effective analysis, ESG integration and portfolio management. Our robust monitoring and reporting program allows us to elevate our identification of potential risk factors and opportunities across all operating, majority-owned investments.

Over the past few years, we have expanded portfolio company reporting to include additional key focus areas and we have further standardized data collection to improve accuracy and year-over-year comparability. In 2022, we rolled out a data toolkit to our portfolio companies to assist with calculating and reporting new metrics.

The data we collect is available to our portfolio companies through our internal dashboard and is used to extract insights about common trends, drivers and challenges across our majority-owned portfolio, and to better assess risks and opportunities for new investment opportunities.

CATEGORY	TYPES OF METRICS COLLECTED	2020 YEAR END	2021 YEAR END	2022 QUARTERLY
Energy Consumption	Electricity consumption / Fuel consumption*	●	●	●
GHG Emissions	Scope 1 / Scope 2 / Gas flaring*	✖	●	●
Methane	Methane intensity and LDAR / Methane reduction	●	●	●
Air Emissions	Number of Title V facilities / Criteria pollutants	✖	●	●
Water	Total fresh/Non-freshwater sourced / recycled water	●	●	●
Spills	Oil spills / Water spills / Chemical spills	●	●	●
Safety, Contractor, Vehicle	Work hours / TRIR / LTIR / PVIR / Lost time incidents*	●	●	●
Regulatory Compliance	#NOVs and associated fines*	●	●	●
Anonymous Reporting	Presence of systems in place	●	●	●
Community Relations	Number and type of complaints	✖	●	●
DE&I	Employee turnover and demographics*	●	●	●

✖ Not measured ● Partially measured ● Measured

* Fully or partially included in the ILPA Data Convergence Initiative

We have expanded measuring and reporting to add new key focus areas and benchmark portfolio performance over time.

Our ESG Performance Survey in 2020 focused on compliance data and safety metrics. We progressed by collecting additional data in 2021, including GHG and DE&I data, and in 2022, we further standardized our data by providing tools to streamline data collection, and we increased reporting frequency to quarterly reports for better visibility.

Quarterly Surveys: As noted above, as of 2022, Quantum collects quantitative ESG data from our portfolio companies on a quarterly basis. By evaluating and analyzing quarterly performance reports, we can work consistently with portfolio company management teams to identify important trends, develop plans to address issues, drive continuous improvement and ensure alignment with Quantum's ESG policies and procedures.

Annual Surveys: Portfolio companies submit detailed annual surveys, including one for DE&I and an extensive methane questionnaire. The methane questionnaire was developed with input from leading environmental NGOs and focuses on the details of portfolio company methane leak detection and emissions management practices.

Quarterly Board Reports: Quarterly reports are prepared by each portfolio company and submitted to their Board of Directors utilizing a standard Quantum-provided template. The reports allow for executive teams to provide longer-term oversight of trends and action plan implementation.

Unplanned Events Reports: We work with our portfolio companies to prevent incidents that may negatively impact people, the environment or the reputation of the company. However, unfortunately, unplanned incidents do occur, and when they do, portfolio companies inform our team immediately. Following unplanned events, we work closely with companies to understand the circumstances surrounding the event and develop mitigation plans.

SPOTLIGHT

ILPA's Data Convergence Initiative

Quantum participates in the Institutional Limited Partners Association (ILPA) ESG Data Convergence Initiative, which aims to streamline the private investment industry's approach to collecting and reporting ESG data, with the goal of creating meaningful, performance-based and comparable ESG data. The project will help our portfolio companies benchmark their current position and generate progress toward ESG improvements, while enabling greater transparency and more comparable portfolio information for limited partners.

The participating firms report on a core set of ESG metrics across six categories that are drawn from existing frameworks. The categories include GHG emissions, renewable energy, board diversity, work-related injuries, net new hires and employee engagement. The data will be shared directly with invested limited partners and aggregated into an anonymized benchmark.

The initiative encourages private market industry stakeholders to work together to gather better, decision-useful ESG data to generate deeper insight into ESG factors and their relationship to financial outcomes and, ultimately, to drive greater progress on critical ESG issues.

ESG Data Convergence Initiative

Quantum Core Cyber Expectations for Portfolio Companies

▶ IDENTIFY

- Document cybersecurity policies and critical inventory
- Designate a senior leader with accountability for the cyber program
- Ensure a corporate Governance & Risk and Controls (GRC) checklist exists and is executed annually
- Perform GRC and vulnerability assessments every 3 years

▶ PROTECT

- Enforce safe password practices, publish a password policy and use Multi-factor Identification whenever possible
- Implement a mobile device management software; install anti-virus and anti-malware software
- Use a firewall and VPN to access company networks
- Maintain off-site backups of all critical data
- Uphold an active cyber education program
- Obtain appropriate cyber insurance

▶ DETECT

- Develop procedures to aggregate logs and events from various systems and synthesize these into alerts
- Regularly review critical alerts from all such systems

▶ RESPOND

- Create documented response plan

▶ RECOVER

- As part of the response plan, address recovery from potential breaches, including:
  - How key data can be restored from cloud and off-site backup
  - How workers get to critical functionality in case of no office network

SPOTLIGHT

The Quantum Energy Cloud – A Next Generation Digital Platform for Private Equity and Energy

The last couple of years have brought about a transformative change to private equity in energy. At the center of it all stands digital technology as a key enabler empowering this change. Cybersecurity, cloud technology, data applications and data science have become important differentiators for private equity companies.

Quantum is taking a digital-centric approach in driving data insights across its portfolio as a pathway to system-level innovation and transformation. This approach is underpinned by high cyber and infrastructure standards, an integrated data foundation across the entire portfolio, flexible industry cloud playbooks to drive software service adoption and a unified machine learning environment. In a strategic engineering partnership with Microsoft, Quantum is developing these capabilities as a unified, yet distributed digital platform called the Quantum Energy Cloud (QEC).[1]

QEC offers a simple and practical way for portfolio companies to take advantage of the latest advances in cybersecurity, cloud computing, data engineering, advanced artificial intelligence and analytics without making large investments internally to develop capabilities in these areas. This focus on high-quality data is expected to provide Quantum with a differentiated ability to have portfolio wide visibility on cyber resiliency, stewardship and ESG performance, and to increase data science adoption.

Cybersecurity resiliency is at the very core of Quantum's digital transformation: The focus on data and digital transformation demands tight security controls and risk management due to the constant evolution of underlying technology advancements and innovations in bad actor behaviors. To deal with this complexity, Quantum instituted a comprehensive cyber program based on the NIST 800-53 Cybersecurity Framework (CSF). This holistic program consists of stringent governance, risk and compliance policies and controls, continuous monitoring and vulnerability testing, information risk management and cyber intelligence operations. In addition, Quantum has published core cyber expectations for its portfolio companies based on the NIST standard, including a requirement to perform a baseline assessment against these expectations and report results back to Quantum on an annual basis.[2]

Quantum performs annual penetration testing on its environment and in September 2022, we underwent NIST 800-53 CSF attestation. We are pleased to report that Quantum met the criteria for NIST attestation and the goal of Tier 4 compliance.

NIST CSF CERTIFIED A-LIGN

[1] See press release: https://www.globenewswire.com/news-release/2022/03/07/2397905/0/en/Quantum-builds-out-industry-cloud-solution-for-energy-and-private-equity-with-Microsoft-Azure.html

[2] Quantum has created a partnership with eSentire to perform baseline assessments with its portfolio companies

INTEGRATED ESG PROGRAM

Diversity, Equity & Inclusion

We believe that employing and empowering a diverse workforce gives us a competitive advantage in our ability to innovate, pivot and make superior investment decisions. We also believe in the value of a work environment and culture that encourages all employees to bring their unique perspectives and backgrounds to work every day and know that their voices are valued and respected.

We have also worked closely with our portfolio companies to adopt and implement DE&I company policies, as well as DE&I-based executive compensation programs. By the end of 2021, 17 of our 26 private equity portfolio companies had adopted DE&I policies and 16 had established DE&I-linked executive compensation programs. For more information about DE&I performance within our portfolio companies, see page 36.

Establishing a successful DE&I culture requires a long-term commitment and specific action plans. We recognize that we have significantly more work to do in this area and intend to improve over time. We will continue to gather transparent data and develop DE&I initiatives as we expand our ecosystem.

Beyond being an equal opportunity employer, we are committed to hiring and mentoring diverse talent and creating a culture of inclusion. We continue to drive implementation of DE&I polices and DE&I-linked executive compensation across our investment portfolio. Our key DE&I initiatives over the past few years include:

- Became a signatory to ILPA's Diversity in Action initiative
- Developed a DE&I implementation plan based on ILPA's D&I Roadmap
- Offered a course on the science of unconscious bias by globally renowned author, Dr. Mahzarin Benaji
- Hired a new Chief Talent Officer to expand our focus on DE&I and career development
- Maintained 100% acknowledgment of compliance with Quantum's anti-discrimination, anti-harassment and anti-retaliation policy

As a result of our firmwide DE&I efforts, we significantly improved our own performance in 2021 compared to previous years.

Female New Hires

13% (2018) ---> 42% (2019) ---> 40% (2020) ---> 43% (2021)

Employee Diversity

17% (2019) ---> 20% (2020) ---> 26% (2021)

40% (2021 Promotions)

SPOTLIGHT

ILPA's Diversity in Action Initiative

Quantum is a proud signatory of the ILPA Diversity in Action initiative, which brings together limited partners and general partners who share a commitment to advancing DE&I in the private equity industry. The goal of the initiative is to motivate market participants to engage in the journey towards becoming more diverse and inclusive and to build momentum around the adoption of specific actions that advance DE&I over time.

As a signatory, Quantum agrees to commit to specific actions that advance diversity and inclusion, both within our organization and the industry more broadly. All signatories are required to undertake four essential DE&I actions and at least two additional actions (from an optional set of nine). The Diversity in Action Framework includes a broad range of possible actions that span talent management, investment management and industry engagement.

ilpa INSTITUTIONAL LIMITED PARTNERS ASSOCIATION

INTEGRATED ESG PROGRAM

Executive Compensation

We work with our portfolio companies to incorporate quantifiable ESG measures into their executive incentive plans, indicating how they will be held accountable for ESG results and rewarded for driving ESG outcomes, with the objective of benefiting shareholders and further promoting a pay-for-performance philosophy that aligns creation of long-term, sustainable value.

At the end of 2021, our majority-owned portfolio companies in which we have operational control were called to incorporate ESG performance metrics into their executive compensation programs. We worked with them to effectively identity top ESG factor priorities for the company and collaborated on developing time-bound goals.

Using our framework, ESG accomplishments represent at least 15% of total variable compensation for executives, in conjunction with financial and operational performance metrics.

Our Process

- Quantum works with portfolio company to assess overall annual compensation structure and determine whether the company is an appropriate candidate for ESG metrics tied to executive compensation
- Portfolio company commits to incorporating strategic, measurable ESG goals into executive compensation plan
- Quantum defines material ESG Factors for portfolio company
- Portfolio company proposes appropriate KPI and weighting for each material factor
- Quantum approves KPIs and associated weighting
- Portfolio company reports on KPIs at year-end

Our Framework

EXAMPLE ESG FACTOR	EXAMPLE KPI
GHG emissions and air emissions	Emissions reduction commitments: GHG, methane, flaring intensities or absolute emissions
Water conservation and spills prevention	Water efficiency, oil spill rate
Employee health and safety	TRIR, LTIR, PVIR
Employee diversity and inclusion; community engagement	Gender or ethnic minority representation in workforce
ESG data monitoring and reporting; compliance	ESG data monitoring and reporting quarterly to Quantum; Business ethics and Code of Conduct
Cybersecurity	Meet Quantum's core security requirements

Portfolio Company Performance

PORTFOLIO COMPANY PERFORMANCE

Current GHG Footprint*

To measure and monitor portfolio companies' progress toward our GHG reduction recommendations discussed on page 13, we performed a comprehensive assessment of their existing emissions footprints, including Scope 1, 2 and 3 emissions. The assessment produced several insights that are being used to inform our portfolio company roadmaps and emissions reduction strategies. For more information about our roadmaps and reduction strategies, see page 32.

EMISSIONS TYPE	Scope 1	Scope 2	Scope 3	
	Operational emissions from traditional oil and gas upstream and midstream gathering	Emissions associated with electricity usage including office consumption and electrified operational equipment	End-product use for all production and throughput	
GHG EMISSIONS (CO_2e)	2,334,756	186,484	88,625,752	**91,145,271** **Total Financed Emissions**
MONITOR & MANAGE METHOD	• Monitor with quarterly ESG performance surveys • Disclose in quarterly Board reports • Aspire to achieve Quantum's operational targets • Implement reduction roadmaps • Participate in working group sessions to share best practices		• Monitor by continuously learning about the risks and opportunities climate change may have on our investments • Disclose how the portfolio is shifting to a lower carbon financing mix over time	

* Data Boundaries and Scope: Our emissions analysis includes GHG emissions from majority-owned portfolio companies associated with oil and gas operations as of December 31, 2021. Companies that had not yet commenced operations or have minimal production were not included.

Emissions analyzed for:

12
Upstream & midstream operators

843
Employees

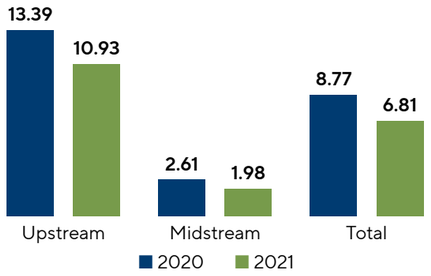
363,170
Gross Mboe

PORTFOLIO COMPANY PERFORMANCE

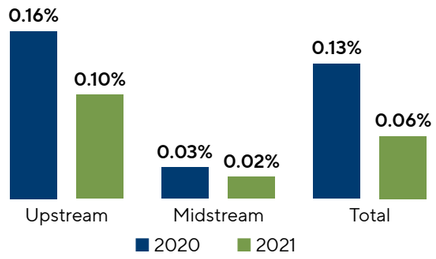
GHG Emissions

To fully understand the climate impact of our operations and track performance improvements, we look at both absolute emissions and emission intensities for our overall portfolio and for each majority-owned upstream and midstream operator within the portfolio. Overall, in 2021, we maintained our Scope 1 GHG emissions compared to 2020, despite an increase in gross production across our portfolio by approximately 30%. The increased production volumes coupled with stable absolute emissions resulted in meaningful reductions in our overall GHG and methane intensities compared to 2020.

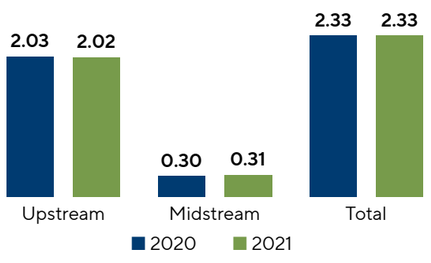
Quantum Portfolio Scope 1 GHG Emissions Intensity
$MTCO_2e/Mboe$



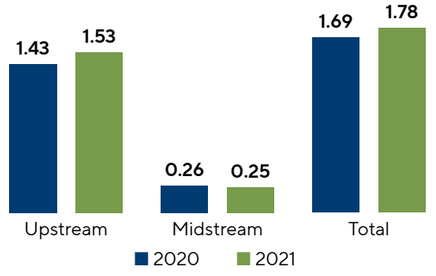
Quantum Portfolio Scope 1 NGSI Methane Intensity
Percent



Quantum Portfolio Scope 1 GHG Emissions
$MMT\ CO_2e$



Quantum Portfolio Scope 1 Methane Emissions
$MMT\ CH_4$



We believe it is critical to understand Quantum's overall emissions performance, and to further evaluate each portfolio company's specific emissions profile. While intensity metrics help benchmark portfolio company performance relative to operations, absolute emissions help frame where companies should prioritize reduction efforts. As a firm, our overall emissions performance will fluctuate as companies enter and exit the portfolio, and as each company progresses their efforts to reduce emissions. Over the investment cycle, we are committed to working in partnership with our portfolio companies to reduce their emissions, with a focus on the companies that have the highest emissions.

continued next page ↓

GHG Emissions *continued*

76%

Carbon dioxide comprised 76% of portfolio operational emissions in 2021

24%

Methane comprised 24% of portfolio operational emissions in 2021

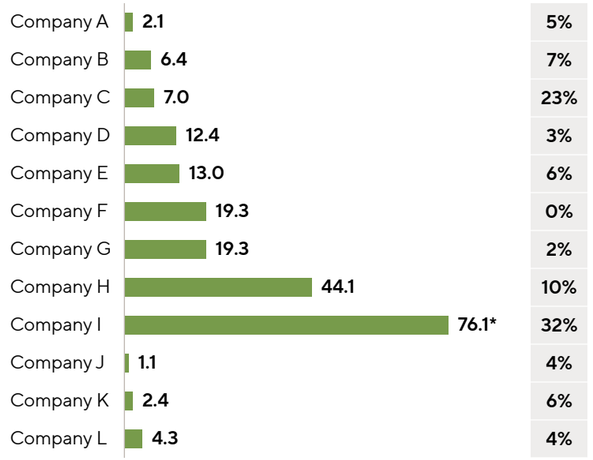
An analysis of GHG absolute emissions and GHG emissions intensities by portfolio company revealed that four companies made up >70% of our aggregate portfolio GHG emissions in 2021. In response, we are diligently working with companies to implement high priority reduction efforts and monitor progress.

By gathering methane data, we can identify its contribution to our total GHG emissions footprint and better understand underlying drivers. The 2021 data revealed that three companies make up >75% of our total portfolio methane emissions. In response, we are prioritizing methane mitigation efforts at these companies.

We recognize that each company has its own unique emissions profile and operational considerations. Based on our engagement with portfolio companies on their roadmaps and the highly collaborative nature of our data gathering process, we can analyze, identify and discuss specific emissions mitigation successes and challenges with each company.

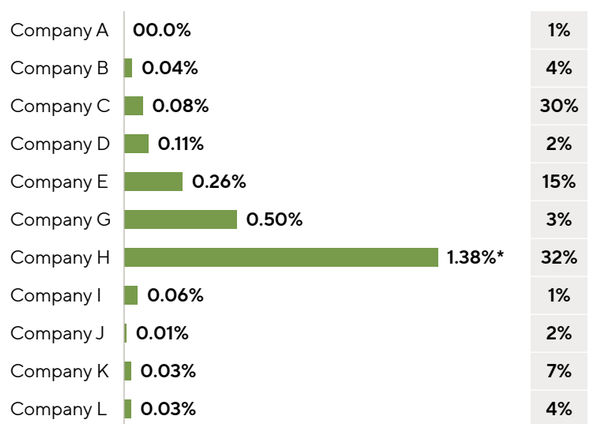
For example, our 2021 absolute methane reductions resulted from specific portfolio company roadmap initiatives like minimizing leaks with enhanced leak detection and converting pneumatic devices to zero-emitting instrument air. Portfolio companies with CO_2 reductions from combustion processes employed a variety of technologies and improvements in 2021, including utilizing bi-fuel engines on fracturing jobs, improving steam efficiency and scaling down compression, when feasible. While some of our portfolio companies may experience a rise in emissions due to growth (e.g., increases in fuel usage from drilling and completion programs and bringing new equipment online), our teams are led by operational experts who are constantly evaluating creative solutions with a commitment to continuous improvement.

2021 Scope 1 GHG Emissions Intensity by Portfolio Company
MT CO_2e/Mboe



* High intensity due to combustion required for steam flood operations. Focused on emission reduction efforts including a pilot carbon capture project to provide a long-term, durable solution.

2021 Scope 1 Methane Intensity by Portfolio Company
Percent

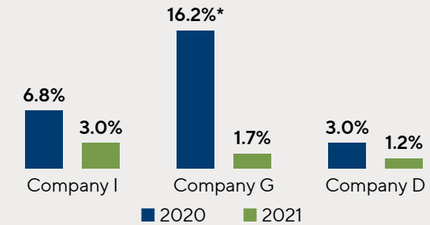


* High intensity due to legacy assets with high counts of pneumatic devices and low production.

FLARING

Portfolio companies that have been flaring natural gas significantly improved their flare performance in 2021 compared to 2020 and are making progress on aligning with best-in-class goals. Their 2021 performance was the result of several initiatives including re-negotiating contracts with midstream partners to ensure gas takeaway, making operational improvements, installing alarms to alert operators of high-pressure tanks and implementing governance-related enhancements, such as reviewing flaring events daily to identify a root cause and develop a mitigation strategy.

Gas Volumes Flared
Percent of Total Gas Production



* Company G's 2020 flaring activity exacerbated by midstream issues which the company amended with their midstream gathering provider in 2021.

PORTFOLIO COMPANY PERFORMANCE

GHG Emissions Reduction Efforts

We work closely with our portfolio companies to measure and manage their GHG emissions. Operational emissions have become a key area of stakeholder concern over the last decade, with methane and flaring specifically identified as categories where companies can achieve significant reductions in the near term. To enable progress on carbon reduction, Quantum requires portfolio companies to generate emissions reduction implementation roadmaps, which include action plans prioritized by reduction impact and costs. These roadmaps include:

- Quarterly actions identified to reduce emissions by source category
- Cost considerations associated with each emissions reduction strategy and activity
- Key performance indicators to be assessed quarterly/annually

Portfolio company roadmaps are active documents that are revisited to incorporate impacts of new technological and operational innovations. We check in with our portfolio companies' roadmap progress on a quarterly basis and facilitate working group sessions with similar operators in the portfolio to discuss progress and share best practices and updates on new technology and reduction solutions. This synergy among operators advances reduction efforts across the operators in the portfolio, a theme that extends further to companies in the Quantum Innovation Fund.

As part of our work to assist companies in their emissions reduction efforts, Quantum connects portfolio companies to Project Canary, a continuous monitoring provider that is in the portfolio of Quantum's Innovation Fund. Our portfolio companies work with Project Canary to obtain more accurate total methane emissions estimates, identify issues more quickly and accurately, implement strategic reduction efforts and enhance their overall leak detection programs. Quantum's investment in Project Canary results in an active exchange of best practices and enhances the value of the entire portfolio. See page 33 for additional information.

Select GHG Emissions Reduction Strategies

SOURCE TYPE	ACTIVITY	REDUCTION STRATEGY
Natural Gas Pneumatics	Device Actuation	• Replace natural gas pneumatics with compressed air units
Equipment Leaks	Leak Detection and Repair	• Install continuous monitoring • Enhance current OGI monitoring programs with more frequent surveys • Conduct field-wide inspections through flyovers
Flaring	Routine	• Capture gas for sale or onsite use • Ensure adequate takeaway capacity prior to production
	Non-Routine	• Improve maintenance programs • Improve downtime • Install alarms on tanks to alert operators of high pressures that cause excess gas to flare
Combustion	Compression	• Convert to air compression
	Drilling and Completions	• Utilize bi-fuel engines onsite • Practice reduced emissions completions
Atmospheric Storage Tanks	Venting	• Limit the number of tanks installed on new facilities • Add vapor recovery units • Replace malfunctioning dump valves

SPOTLIGHT

Project Canary: Emissions Monitoring and Responsibly-Sourced Gas

As part of our commitment to help decarbonize today's energy solutions, in 2021, Quantum invested in Project Canary, a SaaS-based data analytics company focused on providing emission-intensive companies with a fully integrated ESG solution that gives operators the data they need to measure, reduce and report emissions.

CONTINUOUS MONITORING

Project Canary offers a leading continuous emissions monitoring program that utilizes a patented, state-of-the-art sensing system to detect leaks and provide high-fidelity air quality data and real-time insights. Current regulations and industry standards call for operators to survey facilities with infrared cameras on a semi-annual basis to identify and repair leaks. This method requires significant time and resources, with operators driving to each location to survey facilities. In addition, many leaks go undetected between surveys.

Project Canary's emissions monitoring system, Canary X, monitors facilities for methane emissions 24/7, and immediately alerts operators of leaks through Canary's web-based dashboard, enabling operators to act quickly to mitigate fugitive emissions. In addition, due to the constant stream of data flowing from the field-based sensors to the dashboard, operators can identify trends in methane releases and make operational changes, resulting in decreased emissions.

We believe the first step to mitigating emissions is monitoring them directly with the most effective technology available, which is why we recommend continuous monitoring to all our portfolio companies. At the end of 2021, over 1.6 billion cubic feet of Quantum's portfolio company gas production was monitored continuously through Project Canary.

TRUSTWELL™ CERTIFICATION

As a leader in environmental assessments and technology, Project Canary identified the need for the market to access independent, localized, certified data, and offers a combination of solutions for companies to differentiate their product as Responsibly-Sourced Gas (RSG). RSG is natural gas produced by companies that meet independently assessed and verified ESG standards, including air emissions monitoring and reduction requirements. Project Canary offers upstream and midstream companies the ability to certify their gas using its TrustWell™ certification program. The program is the most comprehensive certification process for the energy value chain and includes the evaluation of 600+ data points within 24 operational categories, including 12 dynamic scores for continuous performance improvement.

Standards: What Does A TrustWell™ Rating Mean?

TrustWell™ RATED	TrustWell™ SILVER	TrustWell™ GOLD	TrustWell™ PLATINUM
Actively Improving	Good	Very Good	Best-in-Class
<75 SCORE	75-100 SCORE	100-125 SCORE	125+ SCORE
Demonstrated dedication to continuous improvement	Second quartile performance going above and beyond basic requirements	First quartile performance with highly-effective risk management practices	Top 10% of peers with a demonstrated mastery over risk control and implementation

Our portfolio companies are utilizing TrustWell™ to certify their gas as RSG. Through the RSG certification, our portfolio companies are differentiating themselves in the marketplace by validating their performance on a well-by-well basis, driving continuous improvement in the energy supply chain, demonstrating a commitment reducing emissions and contributing to a net-zero future. For more information, see our case studies starting on page 39 and visit the Project Canary website at: www.projectcanary.com.

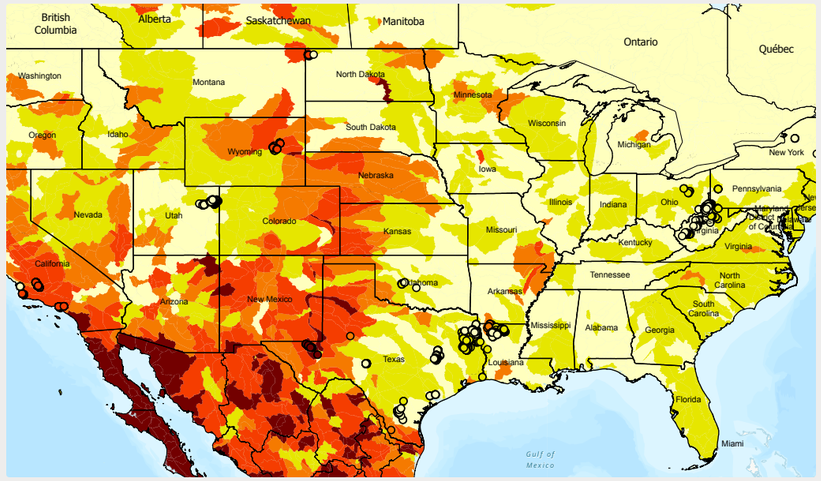
PORTFOLIO COMPANY PERFORMANCE

Water Stewardship

In addition to GHG emissions, we focus on tracking freshwater use, understanding water scarcity in the areas where we operate and using recycled water where possible. We perform an internal water scarcity analysis using the World Resources Institute's Water Risk Atlas to identify areas of concern and focus on companies with activity in these regions. The few Quantum portfolio companies operating in high-risk areas have already taken measures to curb their freshwater withdrawals and are the lowest users of freshwater in our portfolio.

Water conservation is a growing concern throughout the country, and we encourage companies, even in low-risk areas, to find ways to limit their freshwater consumption. In 2021, Quantum worked with a third-party consultant to develop a "Hydraulic Fracturing Water Management Optimization Model" to enable a quantitative comparison of alternative water management scenarios associated with hydraulic fracturing operations. The purpose of the model is to identify the operational scenario that optimizes cost and freshwater reduction on fracking operations, and we plan to scale this model as a resource for all portfolio companies.

Water Risk Index



Overall Water Risk

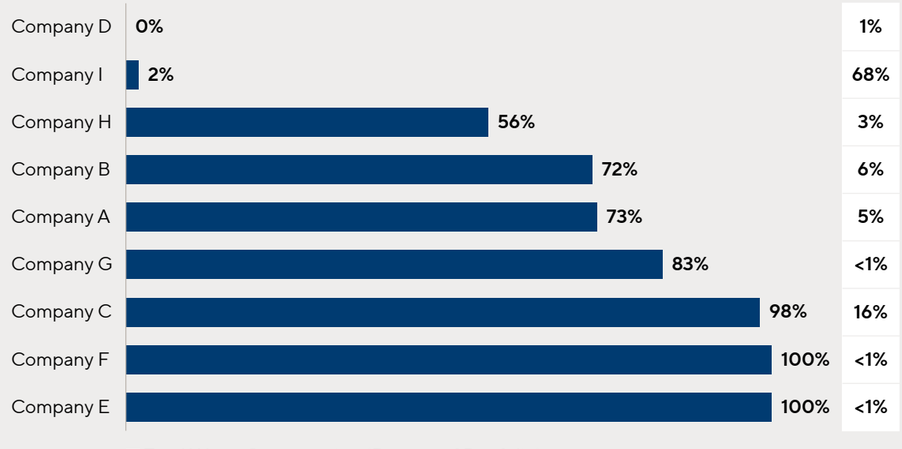
Low (0–1) · Low–Medium (1–2) · Medium–High (2–3) · High (3–4) · Extremely High (4–5)

Quantum Wells

Low · Low–Medium · Medium–High · High · Extremely High

Quantum 2021 Total Water and Freshwater Consumption

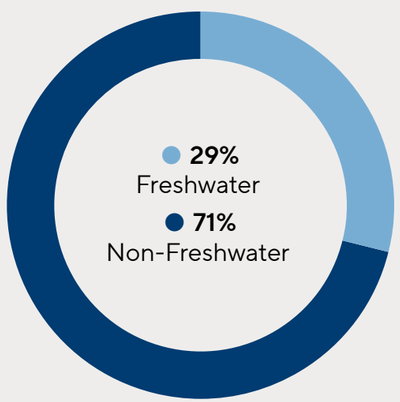
Water Sourced (Percent Freshwater)



* Water sourcing data shown includes upstream producers only. Midstream operators combined comprised 3% of Quantum's overall portfolio water sourced.

Portfolio Water Sourced

% water used in operations by source



Our companies in high-risk areas are limiting their freshwater use. Companies D and I are the two companies with the highest exposure to water risk, with over 94% of Quantum's high water risk wells belonging to those two companies. To mitigate their freshwater usage, both companies have robust water recycling programs, and source the lowest volumes of freshwater in the portfolio.

Quantum portfolio companies recycle over 225,000,000 barrels of water for operational use, which is equivalent to 14,366 Olympic-sized swimming pools.

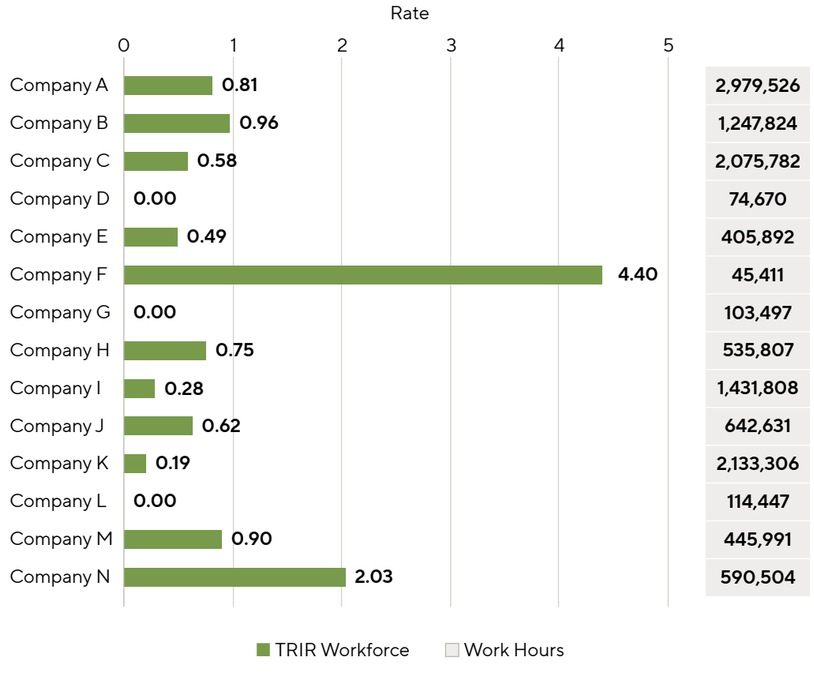
PORTFOLIO COMPANY PERFORMANCE

Safety

We believe that keeping employees and contractors safe is essential for companies to maintain their social license to operate and it is core to Quantum's principles. Quantum portfolio companies report comprehensive safety metrics quarterly and annually for both employees and contractors. In 2021, in addition to recordable and lost time incidents, our portfolio companies reported near miss events. This data advances our understanding of companies that are recognizing and reporting opportunities for safety improvements as potential incidents are avoided.

Our portfolio wide average total recordable incident rate (TRIR) increased from 0.37 in 2020 to 0.65 in 2021, with over 70% of recordable incidents reported by contractors. We acknowledge that 2020 incident rates were significantly lower compared to previous years. With fewer rig counts and less work available for contractors, the remaining workforce was highly experienced, resulting in low incident rates. As demand for energy increases and more new hires enter the industry, we believe it is critical for companies to focus on both employee and contractor protocols to maintain their cultures of safety. Our portfolio companies are highly experienced and understand both the operational and safety trends that occur in a cycle of growth, and they are committed to stewarding the safety of both employees and contractors.

2021 TRIR by Portfolio Company



PORTFOLIO COMPANY PERFORMANCE

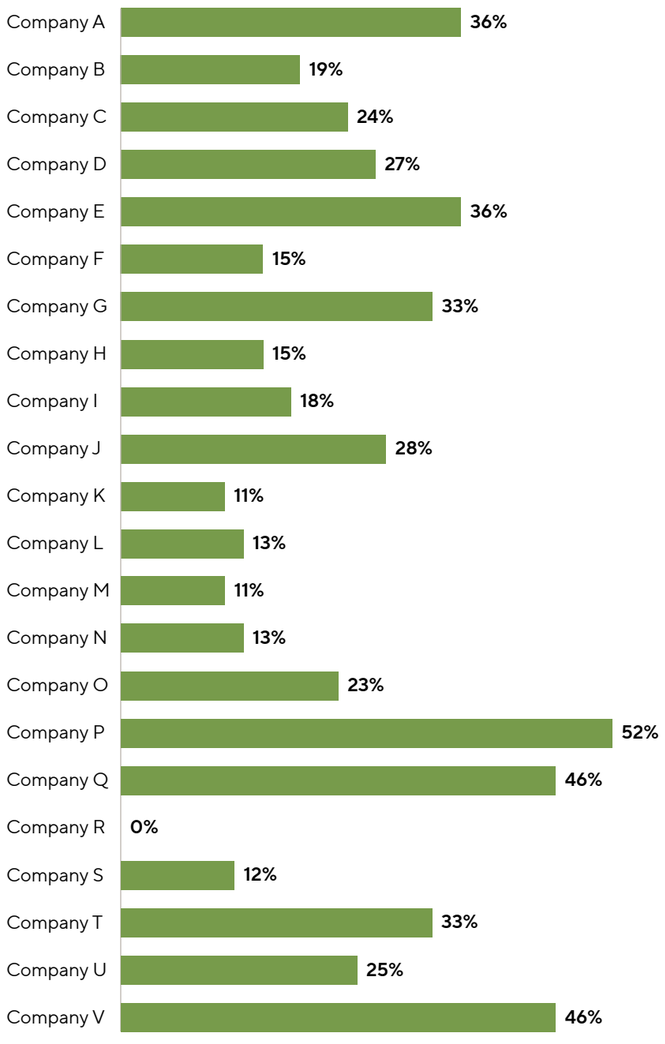
Diversity, Equity & Inclusion

In 2020, we began collecting DE&I data from our portfolio companies. This data provides us with improved visibility and helps us evaluate company DE&I policies. In addition, as companies gather this data annually, they augment their assessment of DE&I trends in hiring and promotions year-over-year. We also utilize the data they provide for the ILPA Data Convergence Initiative (see page 24).

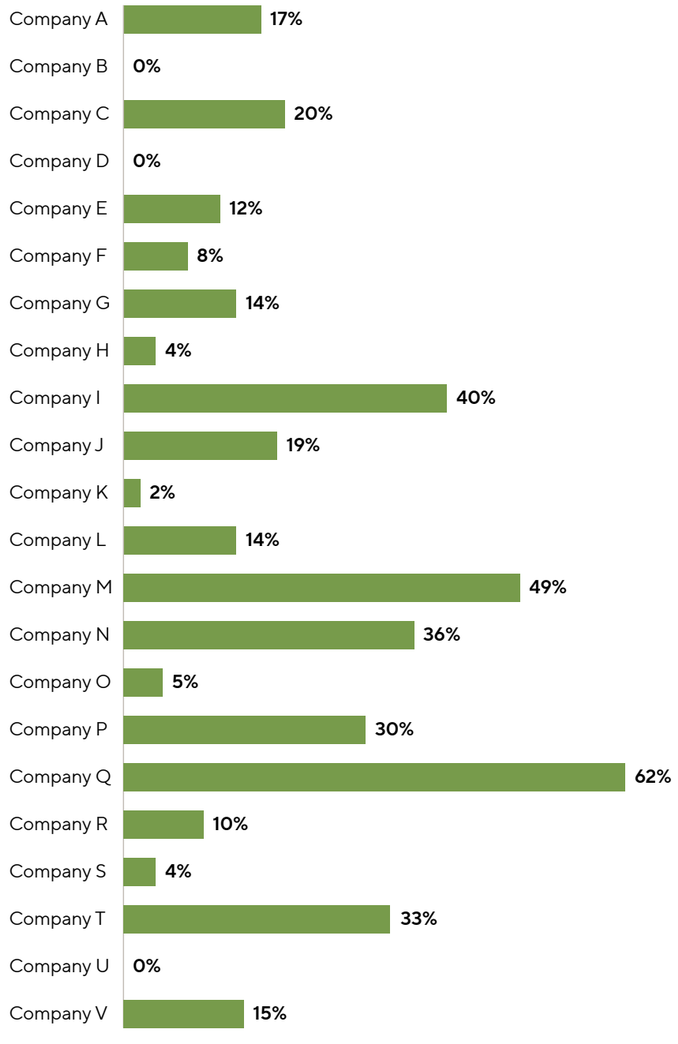
As recommended by ILPA's Diversity in Action Program we track DE&I data metrics across all positions, from entry level to the Board of Directors, including:

- GENDER DIVERSITY
- RACE / ETHNICITY DIVERSITY
- TURNOVER / NEW HIRES
- EDUCATION
- DISABILITY
- VETERAN STATUS

Total Gender Diversity by Portfolio Company
Percent



Total Racial Diversity by Portfolio Company
Percent



PORTFOLIO COMPANY PERFORMANCE

Performance Metrics

As noted on page 20, we gather and report several quantitative metrics across our portfolio companies to assess performance and rate of progress on key ESG focus areas. These metrics are available to all our portfolio companies and can be benchmarked against a company's own past trajectory, with the objective of incentivizing operational excellence and continued improvement.

22%

Decrease in GHG intensity in 2021 compared to 2020

54%

Decrease in Methane intensity in 2021 compared to 2020

71%

Decrease in Flaring intensity in 2021 compared to 2020

ENVIRONMENTAL PERFORMANCE METRICS[1]	2020	2021
Scope 1 GHG Emissions (MT CO_2e)	2,330,819	2,334,755
Carbon Dioxide	1,686,123	1,779,847
Methane	644,100	553,188
Nitrous Oxide	596	1,720
Scope 2 Electricity Emissions[2]	243,645	186,484
Scope 3 Emissions[2,3]	76,109,942	88,625,752
Scope 1 GHG Intensity (MT CO_2e/Mboe)[4]	8.77	6.81
Methane Emissions Intensity (%)[5]	0.13%	0.06%
Methane Monitoring		
Number of Leaks Detected	2,228	1,661
Number of Components Surveyed	524,815	1,280,455
Production Covered by Project Canary Continuous Monitoring		
Flaring Intensity (% of Natural Gas Produced)	2.4%	0.70%
Water Usage		
Freshwater Sourced (Mbbl)	107,550	105,549
% Freshwater Usage	31%	29%
Water Recycled (Mbbl)	185,577	225,744
Spills above 1 bbl of Liquid Released to the Environment[6]		
Water (bbl)	–	77
Oil (bbl)	–	19
Volume of Spills Released to the Environment		
Water (bbl)	–	1,773
Oil (bbl)	–	581

Scopes and Boundaries: The results above include data for the calendar year ending December 31, 2021. The information in this table is based on portfolio company data across all funds provided to Quantum Energy Partners for the reporting year. Reporting companies include majority-owned operators unless otherwise noted.

Data Assurance: As part of our commitment toward continuous improvement, Quantum has engaged a third-party consultant to audit portfolio company performance data for assurance in 2023.

SAFETY PERFORMANCE METRICS[7]	2020	2021
Total Recordable Incident Rate (TRIR)		
Employee	0.36	0.84
Contractor[8]	–	0.60
Workforce	–	0.65
Lost Time Incident Rate (LTIR)		
Employee	0.21	0.42
Contractor[8]	–	0.24
Workforce	–	0.28
Near Miss Frequency Rate (NMFR, employee)[9]	–	1.07
Preventable Vehicle Incident Rate (PVIR)	2.06	1.4

SOCIAL PERFORMANCE METRICS[10]	2020	2021
Total Workforce Headcount	1,648	1,637
Minorities as a Percentage of Workforce	28%	27%
Women as a Percentage of Workforce	19%	20%
Minorities as a Percentage of Leadership[11]	4%	8%
Women as a Percentage of Leadership[11]	13%	11%

1 Environmental metrics include data from upstream and midstream portfolio companies for the production and gathering and boosting segments that are covered under EPA's Subpart W reporting requirements. Certain companies with emissions below reporting thresholds included emissions for this report using calculation methodologies prescribed by Subpart W.

2 Emissions are calculated using portfolio company-provided production data in conjunction with EPA fuel and electricity emissions factors.

3 Scope 3 emissions include production from Quantum-owned minerals companies, with reductions made based on emissions from Quantum companies who produce these minerals to avoid double counting.

4 GHG intensity is calculated as GHG emissions over total hydrocarbon production in barrel of oil equivalent (MT CO_2e/MBoe).

5 Methane intensity is calculated using Edison Electric Institute and American Gas Association Natural Gas Sustainability Initiative (NGSI) methods.

6 Spill metric was updated in 2021 from reportable spills and associated volumes to spills >1 bbl for comprehensive reporting.

7 Safety metrics include data from upstream, midstream and service companies.

8 All companies reported contractor data beginning in 2021.

9 All companies reported near misses beginning in 2021.

10 Social metrics include data from 26 majority-owned portfolio companies in 2021, including minerals and alternative energy companies, and 17 companies in 2020.

11 Leadership defined as senior level vice president to executive level management.

Portfolio Company Case Studies

CASE STUDY

Tug Hill Appalachia: Partnering for Progress

Our Mission

Tug Hill Operating is a low-cost U.S. onshore oil and gas exploration company that is founded upon operational excellence, deep technical analysis and decisions that are underpinned by our core values and economics.

Tug Hill Appalachia (THQA) is an oil and gas exploration company in the Appalachian Basin focused on producing clean-burning natural gas. Tug Hill's focus on operational excellence and detailed analysis, with all decisions underpinned by deep technical and financial evaluation, and a philosophy of doing things right from the beginning has made them a partner of choice in the Appalachian Basin with a highly focused and effective ESG program. Through their holistic and long-term view of oil and gas development, their ESG accomplishments are the result of many years of project planning, intentional execution and enhanced monitoring and reporting.

XcL Midstream, a greenfield natural gas gathering and processing system in Southwest Appalachia, was formed as a complement to Tug Hill, with the idea that building these complementary businesses would drive meaningful value creation for all stakeholders. Through the partnership, XcL can provide Tug Hill with attractive natural gas gathering and processing rates while ensuring reliable, safe and environmentally-responsible midstream operations.

"Our long-term planning and high level of collaboration with all our stakeholders differentiate us by helping us achieve alignment early and adapt and change course when needed. All our decisions are underpinned by economics and our commitment to protect the environment and communities, advance social progress and implement effective governance practices."

Michael Radler
THQA
CEO

Responsibly-Sourced Gas

THQA is committed to utilizing high-fidelity technology and rigorous operating standards to reduce emissions in their operations and produce energy responsibly. In 2021, they conducted a pilot program with Project Canary (see page 33 for additional information about Project Canary). The initial pilot program, which has since expanded, included 45 wells and resulted in a TrustWell™ Platinum Certification from Project Canary, representing the highest certification possible and a performance in the top 10%, demonstrating their mastery over risk control and implementation.

In 2021, THQA and XcL Midstream announced their plan to achieve joint RSG certification from Project Canary's TrustWell™ program. THQA and XcL Midstream are the first upstream and midstream companies to jointly seek independent certification of 100% of their operating assets. The partnership means that, for the first time, gas purchasers will have the opportunity to buy RSG that has been TrustWell™-certified from the wellhead to receipt point, providing an unmatched offering in the market.

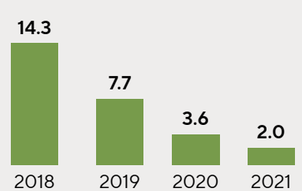
continued next page ↓

CASE STUDY

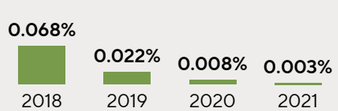
Tug Hill Appalachia: Partnering for Progress *continued*

TUG HILL OPERATING

GHG Intensity Performance
MT CO_2e/Boe



Methane Intensity Performance
Percent

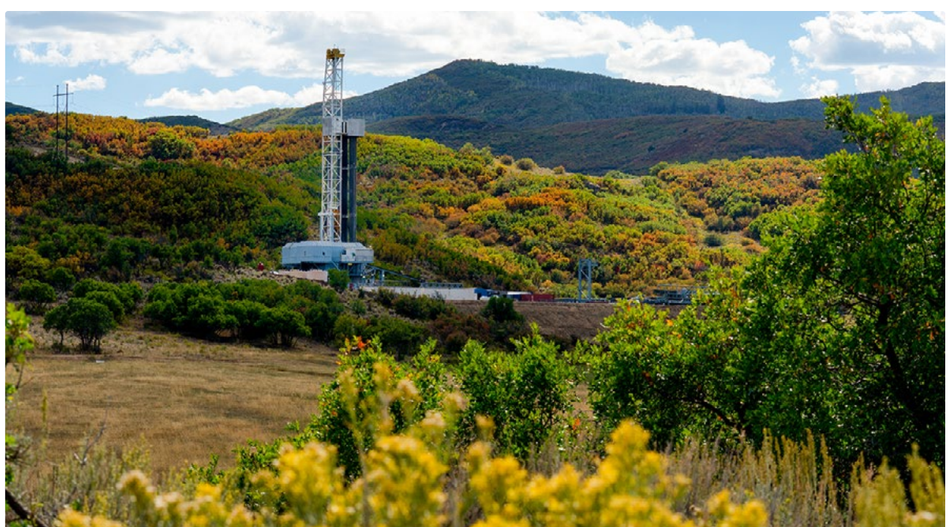


2.0 MT/Mboe
GHG Intensity

86%
Reduction since 2018

0.003%
Methane Intensity

95%
Reduction since 2018



"This partnership between Tug Hill and XcL is a significant moment in the growth of responsibly-sourced natural gas markets. These leading upstream and midstream operators are partnering to demonstrate their commitment to high standards and low emissions across the energy supply chain. Tug Hill and XcL understand the importance of completing the RSG circle so gas buyers can have total confidence that the product purchased is produced and transported in the most advanced and environmentally-responsible manner."

Chris Romer
Project Canary
Co-founder and CEO

Environmental Stewardship

THQA has a dedicated staff of EH&S professionals who work with the operations team to implement programs and procedures aimed at minimizing their environmental impact. They have thoughtfully upgraded production facilities and overall production practices since 2016, and as a result, they have made significant improvements in both GHG and methane intensity.

To enhance reporting and transparency, participate in best practice sharing and industry collaboration, enhance their operational awareness and drive methane leak detection and emissions reductions results, THQA has joined the following initiatives and participates in their required reporting and improvement programs.

THE ENVIRONMENTAL PARTNERSHIP

ONE OUR NATION'S ENERGY FUTURE

Key Emission Reduction Efforts & Priorities

Replace legacy on-pad generators by investing in power infrastructure	• >70% of all pad sites currently utilize grid power and are expected to achieve 80% grid power utilization in 2024 • Removed on-pad generators from 13 of the 17 legacy pads acquired from Gastar (76% conversion rate)
Convert facilities from supply gas to instrument air	• ~80% of all wells (~65% of legacy wells) utilizing instrument air • Designed all new pads with instrument air supply and 100% redundancy • Continuing to capitalize on additional legacy transition opportunities as grid power supply becomes available
Minimize GHG emissions profile across development operations	• Utilizing lowest emissions frac fleet for operational environment and overall stimulation efficiency (Tier IV dual fuel) • Upgraded rigs or replaced specific rigs to enable dual fuel operations on 100% of rig operations • Utilized 100% bi-fuel frac fleets since 2018; 100% Tier IV since 2019
Avoid emissions from equipment leaks with continuous monitoring and enhanced LDAR programs	• Continuous monitoring on >90% of production • Quarterly LDAR surveys on all facilities conducted by in-house OGI-certified field employees

CASE STUDY

Rockcliff Energy: Governance Driving Success

0.08%
Methane intensity

40%
Reduction from 2020

10%
Goal to reduce methane and GHG intensity by 10% in 2022

Our Mission

To safely produce certified responsibly-sourced natural gas in a manner that minimizes the environmental footprint of our operations, provides rewarding jobs for our employees, encourages partnership with the communities in which we operate and rewards our shareholders.

Rockcliff Energy, a top-tier operator in the prolific, highly-economic Haynesville Shale region of East Texas, provides 1.5% of all U.S. natural gas, and it does so in a safe and responsible manner. Driven by a commitment from senior leadership and a dedication to continuous improvement, Rockcliff has built a best-in-class ESG program that is embedded in their culture and lived out in their day-to-day interactions and key initiatives. Rockcliff has been committed to operating responsibly since its inception, but in 2021, senior leadership made the decision to develop an ESG governing structure to accelerate the integration of ESG practices within their business strategy.

Rockcliff formed an ESG Committee comprised of senior executives who oversee the development of Rockcliff's sustainability strategy, provide direction on key ESG topics and help guide sustainability disclosures and engagement. The company built out a full ESG team, led by a Vice President of ESG and Sustainability, that focuses on developing and implementing enterprise-wide programs to address ESG opportunities and risks. Since these teams have been put in place, Rockcliff has achieved milestones that catapulted them to an ESG leader with a best-in-class program.

Environmental Stewardship

Responsible environmental stewardship is an important component of Rockcliff's best-in-class ESG program. They take an innovative, proactive approach to monitoring and reducing their GHG emissions, participating in various third-party monitoring and pilot programs. Notably, in 2021, they achieved a methane intensity rate of 0.08%, representing a nearly 40% reduction compared to 2020, and approximately 70% below One Future's 2025 methane intensity goal. Furthermore, their goal is to reduce their methane and GHG intensity by 10% in 2022 compared to 2021.

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2015
- Founded on ESG principles and practices

2019
- Enhanced contractor safety tracking through Veriforce/PEC
- Initiated "Good Catch" safety program

2020
- Hosted first annual contractor safety meeting

2021
- Committed to Project Canary continuous methane monitoring
- Hired VP of ESG and Sustainability and established ESG Steering Committee
- Implemented DE&I policy
- Developed emissions reduction roadmap
- Committed to tying 2022 executive compensation to ESG metrics
- Began utilization of bi-fuel engines on drilling rigs to curb combustion emissions

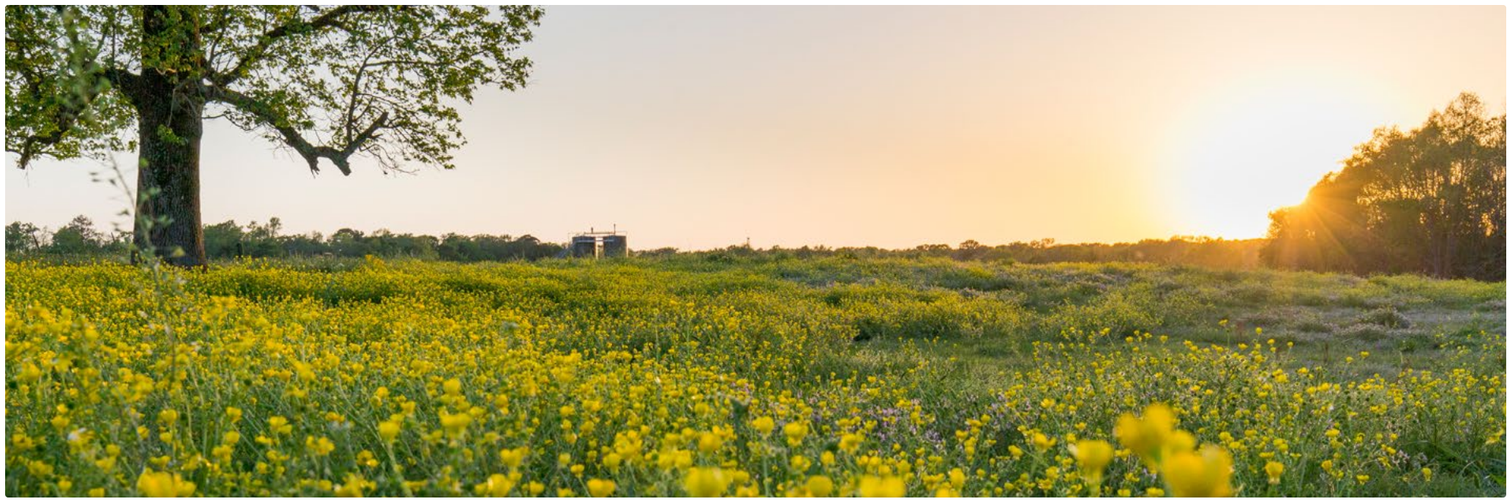
2022
- Hired additional ESG specialists
- Began utilization of friction reducer to reduce freshwater usage on completions
- Utilized Tier IV engines on drilling and completions sites to reduce CO_2
- Became TrustWell™ Certified with 95% of production certified as Responsibly-Sourced Gas
- Published inaugural sustainability report
- Piloting natural gas pneumatics replacements
- Performing salary survey to evaluate equity

CASE STUDY

Rockcliff Energy: Governance Driving Success *continued*

95%
Total production covered by Project Canary continuous monitors

143
Wells achieved Gold Certification by Project Canary



Their efforts included:

- Emissions reducing completion practices, effectively eliminating venting and flaring
- Utilization of bi-fuel engines for drilling and completion activities
- Multi-well pad development
- Transporting 88% of produced water via pipeline, eliminating more than 200,000 annual truckloads and 3.7 million road miles, reducing trucking emissions by 5,000 metric tons
- Participation in a pilot program to evaluate the conversion of pneumatic devices to air actuation, thereby eliminating methane emissions associated with these devices

Rockcliff has also partnered with industry-leader Project Canary to install state-of-the-art emissions monitoring and reporting equipment to spot and measure methane leaks on wells in real time, covering approximately 95% of their total production. Rockcliff is one of only a few small-sized private companies to implement real-time emissions monitoring at such a large scale.

They are also pursuing RSG certification from Project Canary's TrustWell™ program for all existing and future wells in Haynesville. To date, 143 of Rockcliff's Haynesville wells have been assessed and certified by TrustWell™. Soon, Rockcliff will deliver approximately 1.3 billion cubic feet per day of independently certified RSG to domestic and international gas buyers.

Social Responsibility

Social responsibility is also a significant component of Rockcliff's leading ESG program. In the past few years, they have focused on DE&I initiatives, among other efforts. All employees are now required to attend and complete annual diversity awareness training to enhance their knowledge and fulfill their responsibility to treat everyone with dignity and respect. With a focus on equity, Rockcliff is currently completing a companywide salary and position review to ensure team members are being rewarded fairly across the company. In addition, although Rockcliff has always experienced low employee turnover, they are exploring ways to ensure that as they expand, they are attracting people from diverse backgrounds. In 2022, 67% of their new hires were female and 33% were racially or ethnically diverse.

Rockcliff is a top-tier natural gas company with a strategic location in the Gulf Coast markets, a large and highly-economic acreage position, industry-leading operating margins and a best-in-class ESG program that helps guide their commitments to responsible environmental stewardship and social responsibility. They are committed to continuously improving and evolving their ESG program and practices, with the belief that their success is dependent on the success of their stakeholders and the land on which they operate.

> **"Ultimately, our success is driven by exceptional people who utilize innovative technologies to consistently deliver extraordinary results. We strive to be good stewards, operating safely and efficiently, while continuing to grow and promote a secure and low carbon energy future for the benefit of everyone."**

Alan Smith
Rockcliff Energy
Co-founder, President and CEO

CASE STUDY

Sentinel Peak: Operating Responsibly in California

Sentinel Peak Resources is a value-driven organization focused on acquisition, development and exploration of oil and gas assets, with a primary focus on heavy oil development in California. We are committed to building a long-term business while concentrating on operational excellence, serving as stewards of the environment and investing in our people and enterprise. Integration of long-term sustainability decisions into our daily business and strategic projects is a key component of long-term value delivered to our stakeholders.

Sentinel Peak Resources (SPR) is focused on the acquisition, development and exploration of oil and gas assets, with a special focus on heavy oil development in California. Sentinel Peak is proud to be a California operator and early adopter of ESG principles, which have been incorporated into state regulations and community expectations for over 40 years. SPR's sustainability strategy integrates foundational ESG values into daily business decisions and strategic project planning. Their ESG strategy includes:

- Practicing continual stakeholder engagement with communities, employers, contractors, regulators and policymakers to identify opportunities for sustainable synergies and advancing global goals
- Project analysis and assessment of financial solutions, including social and environmental risks and impacts
- Pursuing strategic partnerships to advance sustainability opportunities
- Managing and mitigating the potential environmental impacts of their daily operations
- Investing in new technologies to enhance energy efficiency

SPR is committed to building their California business for the long-term, while concentrating on operational excellence, serving as stewards of the environment and investing in their people, community and enterprise.

Environmental Stewardship

Environmental stewardship is a top priority at SPR, underscored by the company's target to achieve carbon neutrality by 2030. With their geologic expertise, engineering capacity, technology and strategic location, SPR has the tools needed to meet this commitment. To that end, SPR has developed and begun implementing a three-part plan to reduce their carbon footprint and achieve their carbon neutrality goal.

STEP 1: IMPROVE ENERGY EFFICIENCY

SPR is actively implementing cutting-edge energy savings and smart oilfield technology to reduce their emissions. Steam generation used to recover oil accounts for 94% of SPR's operational GHG emissions, making it the primary focus for their reduction efforts. The company has already seen results in improving energy efficiency by as much as 25% on their more mature thermal recovery projects.

STEP 2: ALTERNATIVE ENERGY

SPR is utilizing renewable landfill gas to displace natural gas consumption for steam generation, and they are reviewing the potential to utilize renewable natural gas from dairy farms. They are also utilizing solar energy to power their oilfield operations.

STEP 3: NEW TECHNOLOGY

SPR is actively pursuing multiple options including a carbon capture and sequestration project large enough to not only capture SPR's carbon emissions but provide storage for additional CO_2 sources as well, helping California achieve its climate goals. Sentinel Peak has established key relationships with both funding and technical partners, such as Stanford University, to advance and secure the long-term success of this project.

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CASE STUDY

Sentinel Peak: Operating Responsibly in California *continued*

In addition to the three-step plan, Sentinel also recognizes the importance of minimizing water use, especially given the risks of water scarcity to their operations and the local communities. Since 2020, Sentinel has reduced freshwater purchases by 50% – preserving over 400 million gallons of freshwater per year – and sources over 95% of their water from non-potable sources. Through a comprehensive conservation program that includes water recycling practices and reverse osmosis technology, Sentinel is providing more freshwater than the company is consuming on a net basis. Their Reverse Osmosis Water Plant discharges 310,000 gallons of clean water into Pismo creek each day, supporting creek flow and benefiting vegetation and aquatic life, including species such as the Steelhead Trout.

Further, SPR is committed to protecting wildlife and biodiversity, maintaining approximately 1,560 acres under conservation easements and habitat conservation plans. They also conduct thorough biodiversity impact assessments before operating in new areas. As part of the assessment, they have engaged a biologist to identify potential flora and fauna impacts. All relevant employees, contractors and visitors receive field awareness training on how to operate in and around protected wildlife habitat. One such species protected by these efforts is the California Gnatcatcher, which is designated as a Bird Species of Special Concern by the state of California. SPR is creating and enhancing over 160 acres of Coastal Sage Scrub that will becomes a permanent conservation habitat for the Gnatcatcher.

Social Responsibility

Sentinel focuses on hiring from their local communities, as they recognize that providing opportunities for local economic growth and development is important, not just for the communities but for their business. They also provide competitive benefits and pay packages and robust training and career development programs to all employees. Furthermore, SPR has implemented a DE&I Committee to integrate diversity components into the hiring and screening process. SPR believes DE&I is critical to creating a diverse and unique environment where all employees have the same ability to achieve their professional and personal goals in and out of the workplace.

In addition, SPR focuses on strategically aligning their land divestiture goals with localized needs, considering the potential for meeting local development needs through mutually beneficial projects. One example is the 500-acre Montebello oil field, located 15 miles west of downtown Los Angeles, where Sentinel has successfully worked with the City of Montebello and developers to cause the redevelopment of the former oil field, which creates 1,200 new housing units, more than 270 acres of permanent conversation land and more than 20 acres of new public open space, including 11 acres of parks and 9.5 miles of trails. In addition, in 2019, Sentinel executed the decommissioning and sale of a former 1.1-acre urban drill site located in the Arlington Heights neighborhood of Los Angeles to make way for an affordable housing development. In 2022, they completed abandonments at the 35-well Jefferson drill site in central Los Angeles near the University of Southern California to make way for a new housing project, further supporting local needs.

CASE STUDY

Mexico Pacific: Planning Ahead to Create Shared Value

Our Mission

Advance the global energy transition to cleaner burning fuels, furthering energy security and leading the way toward a closer, more sustainable future. The company is committed to supplying vital energy for decades to come, and promoting LNG as a transition fuel and an enabler of renewable energy.

As the world takes on the ambitious goal of reducing GHG emissions, it is critical to find solutions that are reliable and affordable.

Based in Houston, Texas, Mexico Pacific is working to advance North American LNG and contribute to a more sustainable clean energy future through the development of an LNG export project based in Puerto Libertad, Sonora, Mexico. Under a highly-experienced leadership team, the project is well-positioned to provide cost-effective LNG to Asia with access to an abundance of natural gas from the U.S. Permian Basin.

Initially, Mexico Pacific's anchor project is expected to export up to 14.1 million tons per annum (Mtpa) of LNG from three trains (approximately 2 billion cubic feet per day). The project could ultimately be expanded to export up to 28.2 Mpta of LNG (approximately 4 billion cubic feet per day) under a full-site development of up to six LNG liquefaction trains. The project's strategic location on the West Coast of North America provides access across multiple routes to existing underutilized natural gas pipelines and a significantly cheaper and shorter shipping route to Asia, which avoids the congested Panama Canal and reduces shipping-related emissions compared to other LNG producers located along the Gulf of Mexico. On average, the round trip shipping route is 22 days shorter to Asia compared to LNG sourced from Gulf of Mexico terminals. That represents a ~7,000 metric ton emissions reduction per cargo,[1] or the equivalent of ~17.5 million miles driven annually by an average passenger vehicle.[2]

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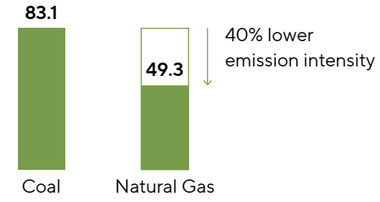
CO_2 emissions savings from coal to gas switching
MMt per annum



At 14.1 MMt per annum, MPL's LNG project could save >600 million tons of CO_2 emissions over a 20-year customer contract life.

[1] Sparks Commodities

[2] EPA Calculator – EPS greenhouse gas equivalencies calculator

CASE STUDY

Mexico Pacific: Planning Ahead to Create Shared Value *continued*

Since its inception and throughout the entire organization, Mexico Pacific has an unwavering commitment to being a responsible corporate citizen with a focus on making the communities they work and live in, and the world, a better place. They are focused on making the right decisions today to ensure a better tomorrow, even if that means pursuing higher cost options in some cases.

Despite the project still being in the development phase, Mexico Pacific has already developed and begun implementation of their proactive, long-term approach to promoting ESG across the energy value chain. They are aligning their business and operating practices with the UN's Sustainable Development Goals and are also committed to meeting the requirements of the Equator Principles.

Mexico Pacific has developed strategic collaborations with world-class partners such as Bechtel, ConocoPhillips and Baker Hughes to explore design, technology and operational alternatives to lower the project's baseline emissions through innovative, lower-carbon LNG design solutions and sourcing renewable power for future phases of the project. Mexico Pacific's project was chosen as the greenfield project for this initiative. The collaboration brings together LNG industry market leaders to leverage one of the most advantaged and competitive North American greenfield projects as a catalyst for the future of low-carbon LNG production.

Creating Shared Value Through Responsible Citizenship

In addition to the environmental benefits associated with their core LNG business, Mexico Pacific has identified strategic opportunities where they can have a positive impact in the local communities where they work through dedicated, consistent, and ongoing engagement with the Mexican and U.S. governments, employees, community members and other stakeholders. They are creating shared value through targeted and purposeful social investment initiatives focused on education, water and livelihoods. Through their comprehensive planning and proactive actions, they have set the standard for effective community relations, resulting in deeper, stronger and more trusting relationships with their stakeholders.

LIVELIHOODS

The Mexico Pacific project will create a significant number of jobs in Mexico, providing meaningful employment with fair wages for many local communities. The construction phase is expected to create an estimated 6,400 direct construction jobs and 15,000 indirect jobs. Once operational, Mexico Pacific plans to employ approximately 700 direct hires, hire 300 resident contractors and create more than 2,000 indirect jobs in Mexico.

FISHERMEN ENGAGEMENT

Fishing is one of the main economic activities in Puerto Libertad and 2021 was one of the worst years in history for those who depend on it for their livelihood. Working in collaboration with local non-governmental organizations, Mexico Pacific is conducting a fisheries sector needs assessment that will inform social investment initiatives in the area. To ensure that its impact is effective and lasting, Mexico Pacific is communicating with both American and Mexican authorities to create awareness about the issues the local fishermen are facing in the area.

SCHOOL RELOCATION PROJECT

The local school is currently located near a fuel tank, which creates a safety hazard for the children of Puerto Libertad. The municipality has indicated that their priority is relocating the school, so Mexico Pacific is in the process of donating three hectares of land for the school relocation project, creating a safer learning environment for the local children and ultimately creating a strong educational foundation for current and future generations.

WATER WELL RENEWABLE POWER

The local municipality extracts water from five wells with storage in two water tanks in Puerto Libertad. The power costs to operate those wells can be a significant financial burden for the municipality. Mexico Pacific is planning to install solar panels, which will provide the municipality with significant cost savings and a lower environmental footprint.

CASE STUDY

547 Energy: Powering the Green Energy Economy

Our Mission

547 Energy invests in and partners with innovative companies and development platforms around the globe that focus on cleantech, renewable power, energy efficiency, grid resilience and the digitization of the energy sector.

547 Energy (547) is the global renewable power development platform of Quantum Energy Partners. 547 is focused on building a regionally-diversified, multi-technology portfolio of renewable power generation, storage and transmission assets that help enable the Sustainable Energy Transition. With a long-term, proven track record of creating value for investors and management teams, 547's leadership team has decades of experience developing, financing and operating global energy projects. As a result, 547 has a nuanced understanding of the industry's evolving commercial dynamics, business and market risks and growth opportunities, positioning the company to make superior capital allocation decisions in the global renewable energy industry.

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547's Development Portfolio

QUANTUM ENERGY PARTNERS

547 Energy

ConnectGEN

Developer of U.S. Wind, Solar and Storage Assets

Houston, TX-based company focused on 24 GW of utility-scale wind, solar and battery storage development in the U.S.

ENTEKA

Greece Renewable Project Company Investments

Co-development arrangement for a ~400 MW wind portfolio in Greece contracted under 20-year PPAs

Aer Soléir

Developer of Renewable Projects in Europe

Dublin-based wind, solar and storage developer led by former CEO of Mainstream Renewables and former CIO of NTR

BlueFloat ENERGY

Developer of International Offshore Wind Projects

Madrid-based global offshore wind development platform led by a team of offshore floating wind pioneers

neton POWER

European Solar Commercial and Industrial (C&I)

C&I solar development platform focused on shared PV systems at industrial sites in Spain

Third Pillar SOLAR

Global Floating Solar PV Platform

Greenfield development of mid-size to utility-scale floating PV solar projects on inland water bodies

CleanArc DATA CENTERS

Integrated Renewable and Data Center Developer

Clean energy-powered U.S. data center developer

CASTALUNE

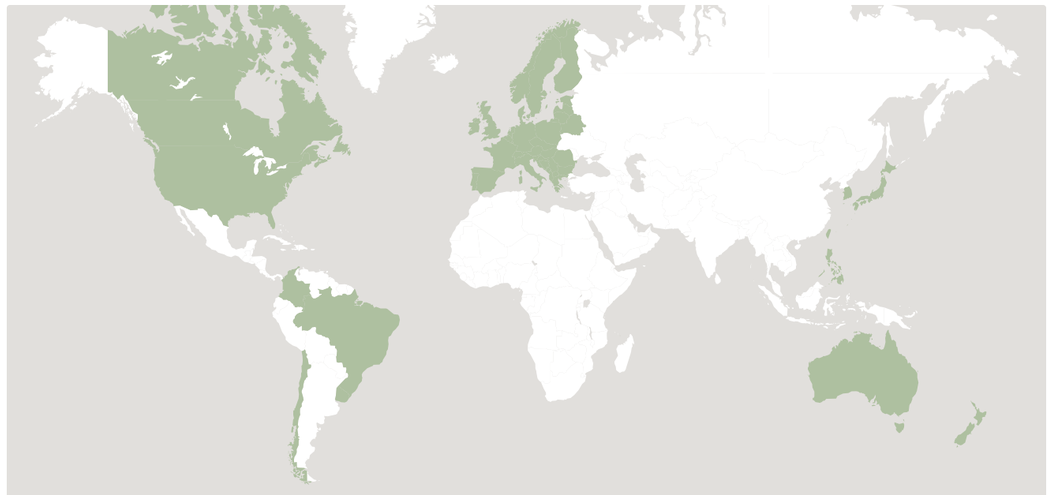
Next-Generation Digital Analytics Firm

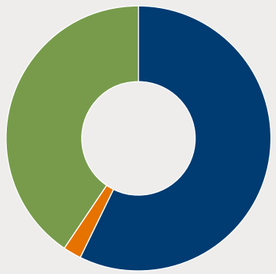
Differentiated analytics software which optimizes renewable projects' design and performance

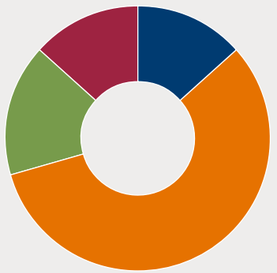
CASE STUDY

547 Energy: Powering the Green Energy Economy *continued*

547's Investment Portfolio Snapshot







Differentiated Investment Approach

Since its inception in 2018, 547 has been able to quickly construct a portfolio of project companies led by seasoned entrepreneurs and a highly diversified and attractive global pipeline of renewable energy projects. 547 has carefully scaled its investments and support teams according to the needs of each business with a greenfield-oriented strategy that allows for better control of upfront capital exposure, greater funding discipline over time and a more diversified investment strategy. 547's deep expertise of the global renewable energy landscape allows the company to anticipate how technologies and markets are likely to evolve over time and gives 547 the flexibility to pivot quickly and decisively when market fundamentals change.

Community Engagement and Economic Development

547 recognizes that its success hinges on the ability of its partners to gain the trust and support of the communities where it operates. 547 is dedicated to working closely with its partners to develop a customized, tailored community outreach strategy focused on increasing its presence, enhancing credibility and reinforcing its commitment to responsible project development. 547 is also focused on helping its partners build and sustain community trust, which requires a relentless focus on transparency, continuous engagement, unwavering respect and a thorough understanding of local dynamics, challenges and prevailing sentiments.

ConnectGen, one of 547's partners, is one of the largest private developers of renewable energy projects in the U.S. As ConnectGen actively advances on a 24 GW multi-technology portfolio across 13 U.S. states, the company also collaborates with local communities in its project locations to establish and fund many community benefits programs. For example, in connection with its Rail Tie Wind project in Wyoming, ConnectGen has built strong relationships with local organizations and stakeholders. During the COVID-19 pandemic, ConnectGen supported small businesses by purchasing gift cards and meals from local restaurants and providing them to local families in need and hospital employees.

ConnectGen is an annual supporter of Laramie Jubilee Days and the Farmers Market, along with other regular contributions to local non-profits. Since Laramie is home to the University of Wyoming, ConnectGen has presented on wind energy to many classes and student groups and looks forward to the learning opportunity that Rail Tie Wind may offer students. ConnectGen's front-line, high-touch engagement with and commitment to local communities helps further its development efforts throughout the project life cycle.

BlueFloat Energy (BlueFloat), another 547 partner, is a global offshore wind platform with development activities in over 10 different markets. In Catalunya, Spain, BlueFloat recognized an opportunity to enable the citizens of the Gulf of Rosas and its surrounding community to invest in an offshore wind project alongside BlueFloat and its partner SENER through crowdfunding. In addition to providing the community with clean electricity, BlueFloat and SENER also want to generate substantial and immediate savings on electricity bills for consumers living in adjacent municipalities.

Therefore, the partnership is exploring self-consumption solutions that will reduce the cost of energy without requiring investments by beneficiaries. In Scotland, BlueFloat, Falck Renewables and Orsted are partnering to develop a floating offshore wind project that will create many local jobs and promote local economic growth. The consortium has already begun work with community ownership experts Energy4All on a new framework to allow Scottish communities to share the financial benefits from the project. The consortium will also collaborate with Energy Skills Partnership Scotland to train up a skilled workforce to support construction of the project and work with the Scottish Association for Marine Science to investigate the potential effects of floating offshore wind development on the marine environment.

Firmwide Disclosures

CORPORATE DISCLOSURES

TCFD Index

The TCFD seeks to develop recommendations for voluntary climate-related financial disclosures as a tool for investors and other stakeholders to assess risks associated with climate change. We use the recommendations of the TCFD for our climate-related reporting on governance, strategy, risk management and metrics.

Going forward, we plan to continue expanding our quantitative disclosures on climate-related topics as we increasingly integrate the TCFD recommendations into our businesses.

SUSTAINABILITY METRICS

TOPIC	METRIC	REFERENCE
Governance	Describe the board's oversight of climate-related risks and opportunities.	Not applicable
	Describe management's role in assessing and managing climate-related risks and opportunities.	Not disclosed
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	See Transitional Risks and Opportunities, p. 15-16
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	See Transitional Risks and Opportunities, p. 15-16
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	See Climate Goals and Scenario Analysis, p. 13-14
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	See Climate Strategy and Climate Risk Assessment, p.12, p.15
	Describe the organization's processes for managing climate-related risks.	See Climate Strategy and Climate Risk Assessment, p.12, p.15
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Not disclosed
Metrics and Targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and process	See Climate Change Section, p. 12-16
	Disclose Scopes 1, 2 and if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	See Current GHG Footprint, p.29; Climate Change sections
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	See Climate Goals, p.13

QUANTUM
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