QIF Quarterly Newsletter – July 2023

They call it "the energy transition" for a reason. Updated forecasts suggest that oil consumption for 2023 will reach a record 102 million barrels/day[1]. Global natural gas demand remains robust at 400 Bcf/day[2], with more than 25% of supply coming from the United States. Give me more electricity too. Global investment in renewables now exceeds new investment in oil and gas exploration[3]. EVs made up 14% of new worldwide car sales last year and some forecast 18% for 2023 as the growth rate accelerates[4]. Domestically, in 2022, residential heat pump sales exceeded gas furnaces for the first time, making up 53% of heating system sales[5].

The world needs more energy of all kinds to support its rising standard of living. Don't count on nuclear energy to be a major contributor (and fusion energy remains a perky newspaper headline but not even remotely close to a commercial technology). Numerous speed bumps interrupt a smooth transition to renewables, especially with regulatory and litigation hurdles delaying permitting of new transmission infrastructure. Increasing capital costs, inflationary pressures, and a need to reengineer supply chains away from dependence on China are also challenges for the energy transition.

Absent a plan of how to get from here to there that addresses (i) energy shortages, (ii) excessive costs, (iii) the hunt for needed raw materials, (iv) investment capital of all sorts, and (v) a sharing of responsibility between the developed and developing nations on how best to decrease CO_2 emissions, the marketplace will allocate resources in step with the often conflicting regulatory and political winds. Clearly, we still have a lot to figure out. Beware, more turbulence ahead.

Passage of the IRA was a massive step in the right direction for the U.S. both from a capital boost with substantial multiplier effects, and from a global leadership perspective, but it alone cannot deliver the prize. We anticipate a total replumbing of nearly every business as it works through adaptation of its existing model to climate change (and the oncoming impact of generative AI).

This spells O-P-P-O-R-T-U-N-I-T-Y.

Fortunately, the entrepreneurial drive continues to ramp up to levels not seen since the Internet became a thing. But, unlike the late-1990s when the bubble burst, many in this cohort of emerging companies bring a higher quality of managerial skills and passions, recognizing both the upside potential and the existential cost of failure.

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[1] IEA's Oil Market Report – May 2023.
[2] IEA's Gas Market Report – Q2 2023.
[3] Investment in new oil/gas exploration and development at ~$500 billion in 2022 is 30% below levels seen in 2010's (before inflation) with reserves not replaced. All that is a positive for those focused on getting rid of hydrocarbons but may not help those who want to turn on the lights without fear of a power outage. Quantum estimates based on data from IHS Markit, Rystad Energy and Bloomberg.
[4] IEA – Global EV Outlook 2023.
[5] Air-Conditioning, Heating & Refrigeration Institute – December 2022.

QIF's existing portfolio is immersed in all of this, and even where we may be ahead of market demand, the trends increasingly support substantial new markets and new business models. We know we see only a fraction of the global opportunity set of new ventures bringing solutions around climate/sustainability, but the large flow requires rapid triage to filter those that we can get excited about. In 2023, we have yet to make a new investment as we work to balance the attractiveness of various investment opportunities with the perceived risks and discipline to secure attractive valuations. In conversations with other venture investors (our 'frenemies') we are not alone in this sentiment. However, with a strong current pipeline, several prospects have clear paths to closing in the second half of this year.

Over the past quarter several of our portfolio companies (**Orennia**, **Dragos**, and **Datagration**) raised incremental equity at strong valuations, suggesting that values, while depressed generally across ventureland, remain vibrant in the sectors we favor for companies executing well. We have a lot more wood to chop before declaring victory, and history suggests that sometimes tailwinds whip around and become headwinds requiring that we show up for work every day.

Below is a reminder of the existing portfolio and what each company does. Also, we invite you to visit our new dedicated website: ***qif.vc***

We welcome your thoughts and advice.

Jeffrey Harris | Heri Diarte | Rob Meister

Chase T. Randolph

Chase Randolph | Tran Ly | Zak Aldelamy

QIF Portfolio Updates

BeZero combines risk analytics, software and science to provide independent and transparent coverage and ratings of carbon offset credits in a historically opaque market. BeZero is introducing ex-ante carbon ratings for project developers to further increase carbon credit quality transparency to accelerate funding for carbon projects.

Carbon Direct provides end-to-end carbon management services to large corporations for seamless carbon footprinting, reduction strategies, and procurement of high-quality carbon credits. Carbon Direct recently launched a software platform that provides organizations with the information and resources they need to deliver on their climate commitments. The new platform provides auditable carbon footprints, actionable strategies for emission reductions, and high-quality carbon removal portfolios.

ChargePoint (NYSE: CHPT) designs, develops and markets networked EV charging system infrastructure connected through cloud-based services. CHPT ended its first quarter on April 30, 2023, with $130 million in revenue, representing 59% Y-o-Y growth. The company continues to extend its technology and market leadership position across North America and Europe, while improving gross margins and capturing better operating leverage.

Datagration delivers enterprise software for upstream operators to integrate data from disparate systems into one platform. The company continues to grow its ARR as more oil/gas operators realize the economic benefits of its software, with multiple contracts signed in Q1 and a strong sales pipeline ahead in 2023.

Dragos provides cybersecurity threat analysis, detection, and prevention software for physical assets primarily for utilities, oil & gas, and manufacturing companies in the U.S. and select other countries. The company continues its rapid growth across the multiple geographies and expanding vertical markets that it serves.

FigBytes provides cloud-based enterprise software for organizations integrating ESG data and performance into their activities. The company recently released an upgraded FigBytes Sustainability Platform featuring new capabilities for climate accounting and climate action, water stewardship, and an enhanced user interface.

Heirloom continues to make great strides scaling its direct air capture technology using limestone to absorb CO_2 and then storing it underground or into materials such as concrete.

Orennia provides market-leading data and analytics to private equity firms, investment banks, utilities, corporations allowing them to make informed decisions across renewables, clean fuels and decarbonization investments. The company continues to grow nicely and recently closed its Series B funding that will enable it to accelerate its revenue trajectory and broaden its product offerings.

POWERFACTORS

[Power Factors](#) is the largest provider of asset management software for owners and operators of wind, solar and battery storage systems globally and continues to expand its business benefitting from the significant worldwide investment in new facilities. The company continues to grow nicely behind an upgraded product offering and broadened product line stemming from its recent acquisitions.

PROJECT CANARY

Project Canary offers low-cost, continuous, real-time methane emissions monitoring with a certification process for oil & gas and other emitters to measure ESG performance and support Responsibly Sourced Gas. The company continues to set the standard for high fidelity measurement and rigorous data analysis based on hard science.

RECURVE

Recurve provides a software and online marketplace platform, called FLEXMarket, that enables demand flexibility from behind-the-meter to help manage the grid and reduce electricity prices. FLEXMarket is live and scaling rapidly in seven open markets in California. As of Q1 202 it has delivered 2x grid value per MWh saved compared to traditional ratepayer-funded energy efficiency programs.

Risilience®

Risilience provides an analytics platform and services to help large companies quantify potential climate risk impact and identify mitigation actions, track progress on their net-zero strategies, and comply with increasing climate-related reporting requirements. The company recently won the King's Award for Enterprise for Innovation in the U.K.

seismos

Seismos uses advanced acoustics technology to help oil and gas operators better characterize well stimulations and improve economics. The company continues to expand internationally and has also begun to serve pipelines detecting flow rates, leaks, and stuck pigs.

WELLIGENCE ENERGY ANALYTICS

Welligence provides data collection and machine-learning based analytics for the oil & gas industry and the financial community and has expanded to cover nearly all worldwide basins other than onshore North America. Welligence is also developing several energy transition-focused offerings including carbon capture.

workrise™

Workrise offers a digital platform for contingent skilled workers in oil and gas and renewables industries and is the leading workforce management solution for the skilled trades. The company has expanded its offering to support upstream company procurement of other value-added services and products.