bon's investments and projects. Does Low Carbon expect to diversify into adjacent categories such as energy storage, carbon capture, forest carbon, electric vehicle infrastructure or rather climate-related sectors?

Today we are relentlessly focused on large-scale renewable energy development leveraging proven technologies such as solar PV, wind and storage, and we also have some waste to energy deployments. We are not afraid of new technologies, but remember, the greatest fusion reactor comes up in the sky every morning, and we feel there are a lot of opportunities globally to turn the sun's energy into electrons. We don't need to invent anything, we just need to execute as fast as we can to provide as much renewable energy as possible to meet the world's increased power needs.

Low Carbon Appoints its First Head of Americas

In March Low Carbon appointed experienced impact investor and technology executive Ed Colligan as Head of Americas. The California-based entrepreneur will focus on supporting the growth in North, Central and South America as Low Carbon works towards its ambition of creating 20GW of operational renewable energy capacity by 2030.

Having started his career in Silicon Valley, Ed was the first vice president of marketing for Palm Computing where he helped develop the original Palm Pilot, and as President of Handspring, Colligan led the launch of the Handspring Treo, the handset widely recognised as the world's first smartphone. Recently, Mr. Colligan has been working with and invested in sectors as diverse as climate fin-tech, micromobility, digital entertainment and neuroscience to scale up their operations and attract meaningful investment.

Mr. Colligan's exceptional track record of growing and scaling businesses during periods of immense market change will be especially valuable as Low Carbon continues to help its partners and markets navigate the global transition to renewable energy. \square

VERTEX COMPLETES PRIVATE EQUITY OWNERSHIP TRANSITION; POISED TO CONTINUE AMBITIOUS GROWTH PLAN

The Vertex Companies Inc. (Weymouth, Mass.) is a leading multidisciplinary engineering and consulting firm that provides forensic consulting, engineering design, construction management, claims and dispute resolution, environmental, and digital solutions to insurance carriers, sureties, law firms, real estate owners, property managers, public agencies, and commercial clients. The firm was founded in 1995 based on the the vision of creating a new type of company that offered traditional AEC services along with forensic consulting. Tetra Tech, Inc. acquired Vertex in 2001, which was followed by a management-led buyback in 2005. Wind Point acquired Vertex in partnership with its founding management team in 2021. In the United States, Vertex has licensed professional engineers (PEs) in all 50 states. The firm has worked in Mexico since 2001, and its wholly owned subsidiary VTX, headquartered in the Greater Toronto Area, has projects across Canada. Since delivering its first international project more than 20 years ago, Vertex has provided services in more than 40 countries. The Vertex family of companies includes: Lockwood, Kessler & Bartlett, Inc., Xpera Group, Compass Project Management, Inc., Optistar Technology Consultants, Inc., VTX Consulting Services Inc., and Vertex Ingenieros, Consultores, S. de R.L. de C.V.

Jaron Frieden has worked at Vertex since 1996 and is the Managing Director of the Environmental vertical. In this position, Mr. Frieden works closely with the senior leadership to lead the direction of all environmental services including Remediation, Industrials, Due Diligence, Industrial Hygiene & Building Sciences, Property Condition Assessments and Marine Fisheries. Mr. Frieden also maintains his position of Managing Director of Remediation, which is his main technical expertise. Due to Vertex's diverse service offerings, he educates clients and colleagues on the benefits of maximizing the firm's Construction Management, Engineering, Litigation Support, and Insurance Services. As with all of the senior leadership at Vertex, he continues to stay involved in complex projects to ensure their delivery and to provide strategic and value-added consulting services.

EBJ: Congratulations on completing your transaction with Wind Point Partners (WPP). We understand that private equity does not always look favorably on buying Employee Stock ownership plan companies due to perceived price premiums and other obstacles. How did you overcome that with WPP, and what was the sequence of events from meeting to completing the transaction?

Jaron Frieden: Yes, there is concern in the marketplace regarding the acquisition of ESOPs. From our experience, the calculation of total price is not an issue for ESOPs because professional services firms simply trade on a multiple of EBITDA, and we found that multiples generally do not vary based on ownership structure. However, the administration of exiting an ESOP is far more complicated than other

more traditional ownership types, so more steps are needed.

We, as a team, decided that the ESOP model was going to constrain our ambitious growth goals, so we discussed available options to maximize future opportunities for our colleagues (e.g., going public, merger of equals, aligning with a financial partner, etc.). After careful consideration, we elected to hire an advisor to help us navigate the world of private equity. In short order, our advisor generated interest from many PE firms. We narrowed the list down to 12 and had discussions with each of them, and then we created a short list of eight to meet with. While we identified several firms that would be great partners, we selected WPP based on the size of the fund, the people, and their experience in the AEC industry.

EBJ: Has the new partnership enabled management to consider a wider range of strategic options for growing the business?

Frieden: WPP are specialists in valuing companies and helping to develop systems to generate organic and acquisitive growth. WPP has internal resources to assist with this as well as a pool of outside advisors. For instance, WPP appointed George Pierson—the former CEO of Parsons Brinkerhoff and Kleinfelder and former board member of WSP—as the chairperson for Vertex's board. George has managed companies with thousands of employees and has invaluable insight. WPP has helped Vertex refine our M&A and integration strategy and assisted us in centralizing our business development team.

EBJ: What is your general outlook for the business in 2022 and 2023?

Frieden: The overall economy is currently in a traditional late expansion cycle, where bearish trends are abundant. Inflation is at a 40-plus year high. The unemployment rate is at a 50-plus year low. The yield curve has inverted. The Fed is hiking rates and implemented quantitative tightening. Despite these indicators, transactional sectors remain strong. Accordingly, Vertex's blend of cyclical and secular services is firing on all cylinders in 2022.

As we move into late 2022 and 2023, we anticipate that bearish conditions will remain the prevailing headwind, so we anticipate growth in our defensive verticals (e.g., forensics and infrastructure) and potential flattening or even compression in our more cyclical services. Vertex's strategy of mixing cyclical and secular services is built to grow through macroeconomic downturns.

EBJ: The commercial real estate business (notably office buildings and to a lesser extent retail) faces many uncertainties in the post Covid world. What trajectories do you foresee for these real estate markets, especially signature markets like New York and San Francisco but also regional urban centers?

Frieden: The vast majority of our commercial real estate clients are large institu-

VERTEX: KEY DEALS IN ACQUISITION HISTORY

2011: McGlamery Engineering Group, LLC

2012: TCS (Technical Construction Services, Inc.)

2016: Optistar Technologies - international information technology consulting

2017: Boyle Consulting Group, Inc. - Forensic accounting

2017: Koch Environmental - Industrial hygiene & building science

2019: Compass Project Management, Inc. - Owner's project management

2019: Compliance Environmental International (CEI) - Services to healthcare industry.

2020: Xpera Group - Construction, forensics and quality assurance on the West Coast

2021: Lockwood, Kessler & Bartlett, Inc. (LKB) – Engineering design and construction services on the East Coast

2022: Neptune Fire Protection Engineering LLC – Engineering and construction management specialties; forensics solutions

tional investors or developers that have a long-term vision for their investment strategy and a substantial amount of capital to place. Although there is likely to be a slowdown given the trajectory of interest rates and continued inflationary pressures, it is more likely that smaller investors and developers will become more cautionary than the larger developers and investors. Recessions are a healthy part of economic cycles that control inflation. Although we have technically seen a recession during Covid, low interest rates and a long economic growth cycle have flooded the market with cheap money, and supply chain and labor shortages have fueled inflation that are resulting in skyrocketing construction costs. It is anticipated that a mild recession will briefly impact the torrid pace of acquisitions and development in the near term while setting the stage for the next healthy expansion cycle.

Vertex's blend of cyclical and secular services is firing on all cylinders in 2022.

Although Covid has pushed investments away from urban offices, multifamily continues to be strong in urban and suburban areas along with rapid growth in logistics and life science development properties. High barrier to entry markets such as New York, San Francisco and Boston have continued to fare better than secondary markets in historic downturns, and it is likely that will be the case in the future as well. Retail appears to remain solid, especially as the population resumes in-person activities and wants more experiential settings.

EBJ: What about data centers and e-commerce hubs? Have you targeted them for new building or retrofit?

Frieden: Yes, Vertex has been engaged in asbestos abatement consulting for a large e-commerce hub in the mid-Atlantic. We have provided environmental and construction consulting for the development of data centers and see that as a growing sector for us.

EBJ: Has the ESG movement changed how Vertex goes about business?

Frieden: ESG is the buzzword of the past few years and thankfully has now taken off in the last year or so as it is becoming important investment criteria for M&A and real estate investing. ESG is quite broad and our clients value different parts depending on their goals. Vertex strategizes with clients to evaluate and recommend key efforts to help meet their objectives. These initiatives have become a bolt-on to many of the energy, environmental, construction, and engineering services we provide. Vertex is also prioritizing ESG in our

WIND POINT PARTNERS ACQUIRES VERTEX

Award earlier this year for acquiring **The Vertex Companies, Inc.** (Weymouth, Mass.), a \$130-million multidisciplinary engineering and consulting firm that provides integrated services throughout the real estate and construction management lifecycle.

Formerly 100% ESOP, Vertex recapitalized under Wind Point Capital. Founded in 1995, Vertex has grown into a national platform that operates coast-to-coast with 30 offices across the United States, Canada and Mexico. Services include forensic consulting, engineering design, construction management, dispute resolution, and environmental, and digital solutions. Clients include insurance carriers, law firms, real estate owners, property managers, public agencies, and commercial.

Vertex's management team, led by its founders, remained with the business and retain a meaningful ownership stake in the company. George Pierson, formerly president and CEO of Parsons Brinckerhoff and of the Wind Point portfolio company The Kleinfelder Group, joined Vertex as executive chairman. Wind Point acquired **The Kleinfelder Group** in 2018, but Vertex represents a separate industry platform given the different services and markets it offers. Wind Point will support Vertex's long-term growth plan by investing in organic initiatives and strategic acquisitions.

Nathan Brown, managing director at Wind Point, commented, "We're very excited to partner with the Vertex team and invest in their next phase of growth. Bill and the people at Vertex have built an exceptional reputation in the industry that has resulted in long-term partnerships with their clients and consistent double-digit growth rates. We look forward to backing the Vertex team in future growth initiatives, including strategic acquisitions that will complement the Company's service capabilities, niche expertise and customer value proposition."

operations by doubling down on diversity, equity and inclusion initiatives and evaluating ways that we can be more efficient to reduce our carbon footprint.

EBJ: How do you expect to participate in markets that are evolving in response to climate change initiatives by corporations or the public sector?

Frieden: Climate change considerations are already a part of most of our development projects. Vertex is well positioned to continue assisting clients with our civil engineering services, building designs, HVAC upgrades and energy evaluations.

EBJ: How would you describe Vertex's relationship with technology? Is it changing in response to internal needs as well as client expectations?

Frieden: We are always focused on technology and understanding emerging trends so we can be at the forefront of ex-

citing ways to increase efficiencies and provide better value for our clients and employees. Vertex acquired Optistar, our IT service provider, several years ago. Optistar provides internal IT support and is also a managed services provider (MSP) for external clients. As such, we have leveraged this relationship to create internal systems, including a proprietary client relationship management (CRM) system. Efficiencies gained from using software to complete reports, timesheets and expenses, as well as creating better transparencies for our clients, has been important in order to remain a best-in-class firm. We will continue investing in technology and looking for ways to provide a better experience for our clients and employees.

EBJ: What climate change impacts have you observed in your lifetime?

Frieden: Climate change and associated initiatives to reduce carbon footprints

have evolved tremendously over the past 20 years as it has become increasingly apparent that we must be proactive with energy conservation to preserve what we love about our world so that generations to come can also enjoy these same pleasures. Now that energy efficient buildings and companies that have strong ESG programs are valued higher than their counterparts, there has been real change in how buildings are designed and constructed and how companies run their operations.

The ESG movement has propelled companies in the AEC industry not only to help clients achieve their goals but also feel good about the outcome for the planet. This is a substantial motivator for a lot of our employees at Vertex and we continue to embrace these opportunities with our clients.

EBJ: What inspired you to get involved in this industry and pursue your chosen career path?

Frieden: I grew up in a family of contractors so I knew that I wanted to do something in the construction industry. I am also an avid chess player, so strategy has always been a passion of mine. I began my career at Vertex in 1996 after graduating from the University of Massachusetts. Two professors guided me toward a degree in Geology with a concentration in Hydrogeology that included classes that studied the new Massachusetts Contingency Plan, which privatized the regulation of hazardous waste sites to Licensed Site Professionals. The curriculum that UMass provided was a perfect match for the skill set needed to excel in this growing industry.

Twenty-five years ago, I met with Jim O'Brien, LSP and Jeff Picard of Vertex, which at the time had 11 employees and aspired to become a national consulting firm that prioritized clients' needs by effectively solving their problems quickly and efficiently with a constant sense of urgency. Although I was just out of college, I knew that we shared the same passion to succeed in this industry and I never looked back. Twenty-five years later we are now over 700 employees and poised for continued substantial growth, and I am still having a fun being part of this amazing team.