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Infrastructure Markets in the 2020s

Environmental Business International Inc.

CEC ENVIRONMENTAL BUSINESS HAS STEADY GROWTH WITH THE TRANSFORMATION OF THE POWER SECTOR; ACQUIRES SITEC IN NEW ENGLAND TO ADD ON IN RENEWABLES

Founded in 1989 and headquartered in Pittsburgh, Pa., **Civil & Environmental Consultants, Inc. (CEC)** is an expanding company with more than 1,000 employees in 26 offices nationwide and revenue of about \$180 million in 2019. CEC provides innovative design and permitting solutions and integrated expertise in air quality, civil engineering, ecological sciences, environmental engineering and sciences, manufacturing infrastructure services, survey/geospatial, waste management, and water resources. CEC serves a diverse client base that includes the manufacturing, mining, oil & gas, power, public sector, real estate, and solid waste markets. CEC ranks #99 on Engineering News-Record's 2020 list of the Top 500 Design Firms and #90 on Engineering News-Record's 2020 list of the Top 200 Environmental Firms.

Amanda Black, Principal and Power Market Group Lead, is a chemical engineer with more than 20 years of experience. As the corporate Power Market Group leader, she is responsible for identifying trends and opportunities in the various power submarkets, as well as developing, implementing, and monitoring strategies and initiatives for increasing CEC's service offerings to the power industry. She has extensive experience in air permitting of major and minor sources throughout the United States and has assisted clients in the power, oil and gas, and manufacturing market sectors. Her expertise includes environmental permitting, environmental auditing, environmental compliance review, emission inventory development, and technical writing and review. She is involved in the Air and Waste Management Assn. and the Marcellus Shale Coalition.

EBJ: Congratulations on acquiring SITEC. Could you explain what drove this acquisition and whether COVID impacted the process?

Black: On August 1, 2020, CEC acquired civil engineering and land survey firm SITEC, Inc. (SITEC) of Dartmouth, Mass. The decision is part of CEC's ongoing strategy to grow and diversify the capabilities of our existing operations. SITEC provides design and engineering services for retail and commercial developments, office and industrial facilities, and single and multiple family residential developments. COVID had no impact on the acquisition process. CEC was interested in merging with SITEC to expand the breadth of services offered and the clients that are served by our Boston-area operation. Not only did SITEC's culture fit well with CEC's (one of the most important

factors CEC considers for acquisitions), SITEC also has a strong portfolio in solar energy, which is complementary to CEC's focus on the renewable energy industry. SITEC's solar energy industry experience includes providing services for more than 20 large-scale projects for local and national solar power companies. With the acquisition, CEC's Boston-area operations also gained the capabilities to provide regional survey/geospatial services, already a core practice within CEC corporate-wide.

While we are actively speaking with several firms regarding future acquisitions, CEC is most interested in developing our employees and hiring new employees to grow organically. We prefer organic growth because it allows us to maintain our culture, our values, and our business practices without the hurdle of overcoming the culture of an acquired firm. Future

acquisitions we are evaluating would not result in expanding geographically; they would occur when we find the right person, culture or capabilities to add to one of our existing operations.

EBJ: How has business been recently?

Black: Our firm continues to expand geographically, which creates new opportunities to provide additional environmental services in new markets. Though our environmental revenues have grown steadily over the past four years, seeing an increase of more than \$36 million, our division of work has remained relatively consistent over the past four years, with environmental revenues hovering around the 70% mark of our total gross revenue. In 2019, CEC's gross revenue from environmental services was \$122.81 million. CEC broke into the top 100 on Engineering News-Record's Top 200 Environmental Firms list in 2014 and has remained in the top 100 since then. CEC ranks at #90 for 2020.

EBJ: Many of CEC's clients operate in the power industry. What investment trends do you see in the coal, natural gas, wind, and solar segments?

Black: The landscape of the power industry has evolved over recent years, and even more so in the past year or two. We've been working with some of our power clients for decades while others are brand new to both us and the industry. While work with some of our legacy clients in coal-fired generation has been fading due to plant closures, they still need us to assist with on-going environmental compliance needs, air quality needs, and navigating compliance with Coal Combustion Residual (CCR) rules. There is also new life to the industry with the growing interest and support for renewable energy. We're seeing investment in renewables from both traditional power generators and investment companies.

EBJ: Is new investment from new power investors fueled by private equity or other sources of capital? Also with many corporations committed to zero carbon, are they investing in their own carbon free power or hoping to buy it on the open market?

Black: We are seeing a mix of scenarios regarding investment in renewable energy. Some traditional independent power producers are developing their own renewable energy sources, some are purchasing megawatts from power investors and some private equity investors are developing renewable resources and flipping them to power producers. The landscape of the industry is going through transformative times because of the transition to a clean energy future. Each company has their own established clean energy goals, including not only the power producers but their customers. Several companies from a broad range of sectors have clean energy goals, so there is even more of a demand for green energy from their power producers to help meet these goals. Corporate power consumers use a mix of methods to decrease their carbon footprint and in some cases self generation is a component of their plan.

EBJ: What impact are changing regulations having on the power industry?

Black: Changes in regulation present a difficult challenge for our clients with fossil fuel generation. Stringent environmental regulations have often been the driver for plant closures and bankruptcies. In addition to complying with existing and ever-changing federal requirements, states are implementing their own, more stringent programs for regulating CCR, greenhouse gases, and waste management.

EBJ: What market trends do you see in power generation, transmission, and distribution?

Black: Due to increasing environmental restrictions and economic incentives, traditional power generators are diversifying their fleets to include renewable energy. With the change in the generation profile and aging infrastructure, the need for new and improved transmission and distribution infrastructure is in de-

mand. We're seeing an increase in investment from our clients in work related to upgrades of transmission and distribution lines and substations.

EBJ: Which environmental services are most requested by power clients?

Black: Our traditional generation clients continue to be in need of help with environmental compliance. The economic state of the industry has led to reductions to in-house environmental staff, so consultants are relied upon for compliance items such as waste reporting, air emissions annual reporting, permit compliance certifications, environmental permit renewals and modifications, and groundwater monitoring programs.

Within the renewables market, we're seeing an increase in environmental support related to new capital projects including environmental property assessments, ecological and cultural resource surveys, environmental permitting, stormwater design and civil engineering services.

EBJ: Many of the functions you list as likely to be outsourced look to be amenable to artificial intelligence.

Black: There is definitely a rise and more interest in AI solutions to help supplement the workforce. We're seeing more opportunities with working with drones not only for cost savings but for worker safety. I don't believe these technologies will eliminate the need for staff support but it's a way to do work more efficiently and safer. These technologies are still emerging and being developed, but with the great interest and some investment, we will see more AI solutions in the future.

EBJ: Can you comment on CEC's recent projects for power clients?

Black: New development projects are always exciting because it brings a team of experts together to provide support in all phases of site development including site intelligence and selection; conceptual design and permitting; engineering construction design and construction oversight/project completion. We have been providing environmental and site civil engineering services to a client constructing a new

solar farm in Pennsylvania. The project is the first solar development of its kind in Pa., and the Pennsylvania Department of Environmental Protection used it as a basis to develop a new regulatory guidance document for developing solar farms. This project helped us navigate new territory and gives us the experience and lessons learned to share with other solar developers.

EBJ: What are the highlights of CEC's manufacturing infrastructure services? How does your environmental practice support such services?

Black: CEC established Manufacturing Infrastructure Services (MIS) as a complementary practice to expand our support to clients in several markets that we serve. The MIS practice provides integrated facility arrangement, mechanical, electrical, piping, structural, civil, and HVAC engineering to support the construction of new facilities or the modification, upgrade, or expansion of existing metals, minerals, and general manufacturing facilities. The MIS group guides clients through the early stages of conceptual design with pre-project planning services, provides clear and efficient detailed designs with reduced construction durations, and supports the construction manager and installation contractors with information and clarifications that help avoid costly downtime and errors. With the addition of the MIS group, CEC provides a full complement of engineering and design services. Clients who engage CEC's MIS group have access to all our other services, including services in Environmental Engineering and Sciences, which means we can assist them throughout their entire project lifecycle. The practice currently is based in CEC's Pittsburgh headquarters office, though our MIS staff travel nationwide to support any project. □

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