

FUTURE OF

Workforce Development: Advanced Air Mobility Infrastructure

BUILDING A WORLD OF DIFFERENCE®

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Paul Stith

AVP, Global Transportation Initiatives
Strategic Growth
StithP@bv.com



Backed By Strength & Innovation, Delivering Sustainable Infrastructure









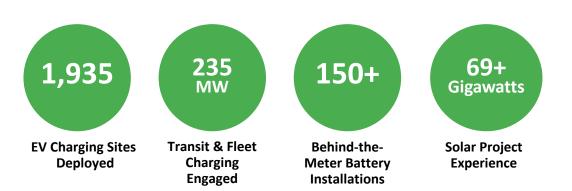
- 9,200+ professionals
- \$3.3 billion in 2021 revenue
- Work in 100+ countries on six continents
- Consistently high industry rankings in Power, Telecom, Water and more
- Highest Safety Standards



Unlock Zero Emission Access to the Sky

Developing the Workforce behind Infrastructure Magic

- How much clean energy and power will your fleet require and where will it come from?
- How many sites will power your fleet your network in 5, 10 & 20 years?
- How much mission critical data and bulk data do you need to transfer?
- What expertise will you need to develop or hire to realize your program in the real world @Scale?



NASA Infrastructure Study



BETA Technologies

Ampaire Infrastructure Collaboration

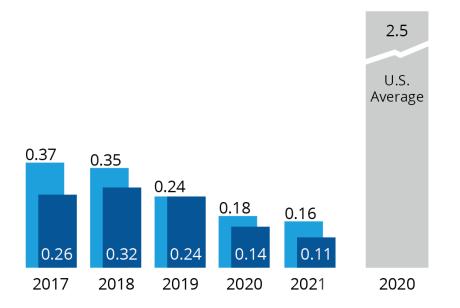


FAA Licensed BVLOS LIDAR T-Line Corridor Scan

Think, Plan, Act Initiative

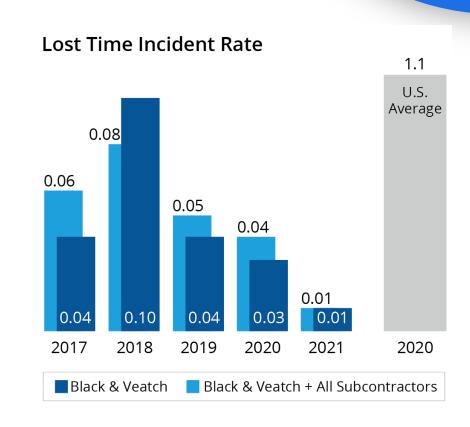
Everyone returns home safely each day

Recordable Incident Rate



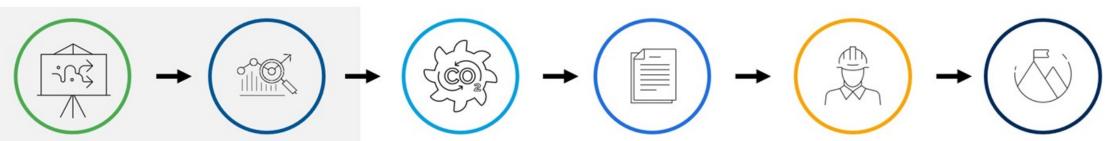


Everybody returns home safely each day



Infrastructure Market & Program Development Skills

Energy Modeling, Planning, Standardization, Certification, Technology Integration, Testing, Stakeholder Engagement, Working Groups, Policy



Strategy

- Current state assessment
- Technology futurecasting
- Market & regulatory view
- Provider landscape
- Economic & CO2 modeling across business
- Road mapping

Investment Planning

- Ranking of investment options
- Identify how investment options rank over time
- Co-optimize cost savings with CO2 savings
- Identification and decision-making support for initial investments

Prelim. Feasibility & Design

- Detailed site assessment
- CO2/\$ efficiency validation
- Go/No-Go decision on site based on feasibility

Detailed Engineering

- Engineering designs
- Zoning and permitting
- Power connections
- Procurement & purchasing
- Qualify and manage subcontractors

Construction & Commissioning

- Mobilization
- Site kick-off
- Site prep/civil works
- Electrical
- Mechanical
- Communications

Operation & Maintenance

- · Testing and training
- Startup & commissioning
- Project closeout
- Alarms & monitoring
- Infrastructure management



- Manage overall program of multiple concurrent decarbonization initiatives globally
- Track & measure results of initiatives
- Apply lessons learned across projects
- Continual update of investment prioritization as technology advances & costs change

Delivering Complex Programs (Per Site Effort!)

- **Concept Prioritization**
 - **Development & Budgeting**
 - Site Investigation & Selection
 - Site-specific Design
 - Permitting
 - Facility Design
 - **Equipment Procurement**
 - **Utility Interconnections**
 - Site Construction
 - System Integration
 - Commissioning & Turnover
 - Operation & Maintenance

with total lifecycle cost





Scalable and future-proof to meet needs for flexibility & growth

Qualified Suppliers Network

- Small Business Enterprise (SBE)
- Minority Business Enterprise (MBE)
- Women Business Enterprise (WBE)
- Veteran-Owned Small Business (VOSB)
- Service Disabled Veteran Business (SDVB)
- LGBTQ, HubZone Enterprises
- 8(a), Small Disadvantaged Business (SDB)
- Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)
- Disability Owned Business



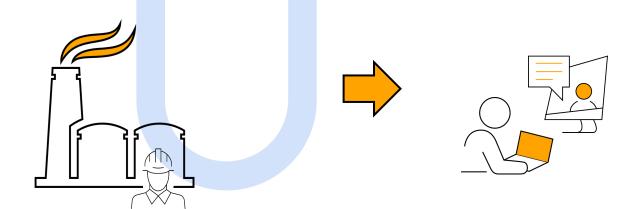


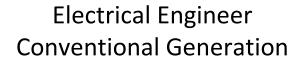
Reskilling

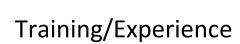
- Learning new, unrelated skills enabling the professional to execute a different job
- Involves a change in position, career, or career path

Upskilling

- Learning new or additional skills enabling the professional to better execute the same job
- No change to career path









Electrical Engineer Solar Generation

Diversity, Equity and Inclusion at Black & Veatch

CEO ACT!ON FOR **DIVERSITY & INCLUSION**



Conversations of Understanding

discussions about equity, diversity

- Steve Edwards signed CEO Action for Diversity & Inclusion
- Launched Black & Veatch DE&I Council and Partner Network
- 2020 Forbes America's Best Employers for Diversity
- Recognized by the Human Rights Campaign with a 100% score on the Corporate Equality Index three consecutive years (2019-2021)
- Joined The Valuable 500, the global CEO community focused on advancing disability inclusion in the workplace
- Ranked as a 2021 Top 50 Employer by Woman Engineer Magazine
- Recently joined the Human Rights Campaign's Business Coalition for the Equality Act
- Launched company's first Diversity, Equity and Inclusion strategic plan focused on increasing leadership diversity, implementing intentional diversity hiring strategies, mitigating potential systemic barriers and biases in our HR practices and working with clients, suppliers and partners to advance DE&I in our industries and communities.
- Actively expanding supplier diversity within our industries; partnering with diverse firms and participating in National and client specific supplier diversity conferences
- Community outreach and philanthropic giving focused on reducing inequalities through the Black & Veatch Foundation

Sustainable Infrastructure Development

Black & Veatch's annual sustainability report details the company's efforts across seven environmental, social and governance commitment areas aligned with the United Nations Sustainable Development Goals (SDGs).







Thank You

Paul Stith

Associate Vice President, Global Transportation Initiatives

<u>StithP@bv.com</u>

Learn more about our work: https://www.bv.com/industries/transportation/electric-aviation

WE WROTE THE BOOK:

Download at www.bv.com/ebooks





Smart Transportation

EV, H2 & AVIATION INFRASTRUCTURE WHITE PAPERS:



<u>EVS29 – Advancing Hydrogen</u> <u>Fueling Infrastructure in the U.S.</u>

Regional Air Mobility



EVS30 – Priming the U.S. Grid for High-Powered EV Charging



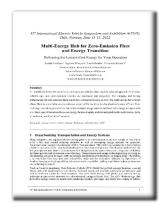
NIA / NASA Urban Mobility
Infrastructure Report



EVS33 – Summary of NIA NASA Report



Understanding and De-Risking EV Charging Power Delivery



<u>FVS35 – Multi-Energy Hub</u> <u>for Zero-Emission Fleet</u> & Energy Transition

NASA - Regional Air Mobility Whitepaper