Multi-Fuel Energy Hub

Providing the cleanest, lowest cost energy, at the exact moment needed, for zero-emission vehicle fueling and facility power.

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Black & Veatch Corporation

BLACK & VEATCH

Agenda

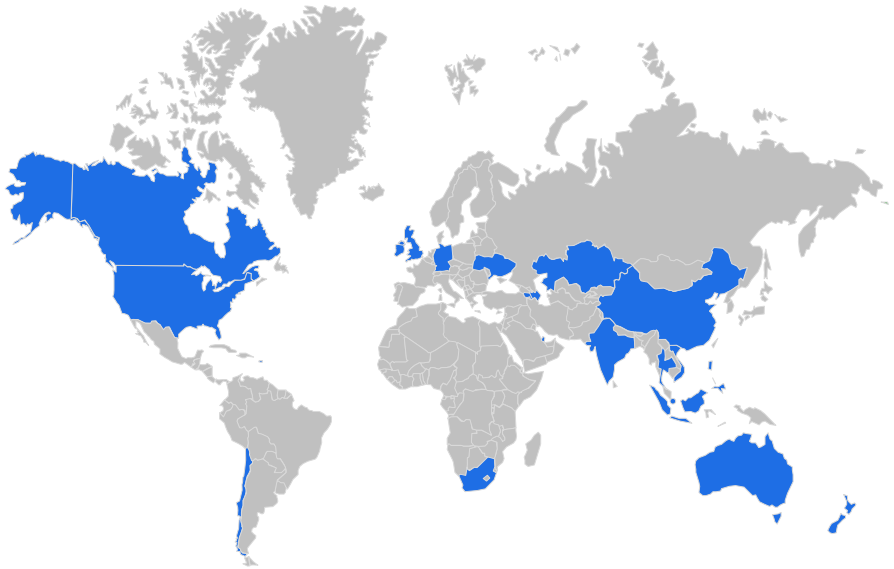
- Intro to Black & Veatch
- Multi-Fuel Energy Hub Overview
- Energy Decarbonization Planning
- Energy Generation, Sourcing & Storage
- Business Models
- Q&A

Backed By Strength to Make Great Things Happen

HUMAN RIGHTS CAMPAIGN FOUNDATION
BEST PLACES TO WORK for LGBTQ Equality
2021
100% CORPORATE EQUALITY INDEX

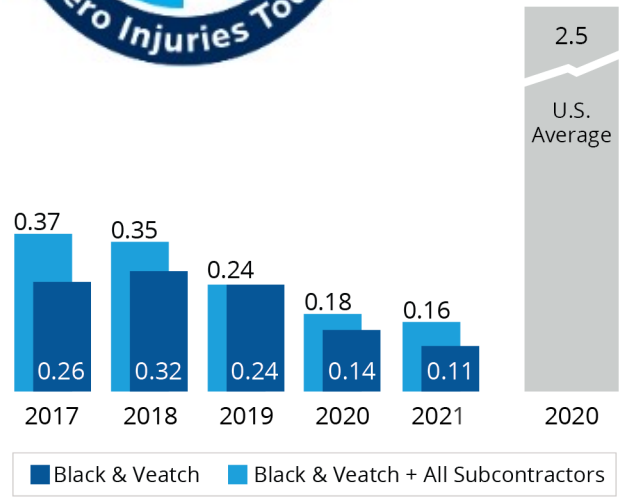
EDISON AWARDS
GOLD
2021 WINNER

CEO ACT!ON FOR DIVERSITY & INCLUSION



- 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
- We Build Critical Infrastructure for Society

Think • Plan • Act
Zero Injuries Today



Everybody returns home safely each day

Black & Veatch: Decarbonizing Transportation

High-Powered Charging

Hydrogen Refueling

Renewable Energy

Battery Energy Storage

- Strategy, feasibility, planning, design, engineering, permitting & constructing **EV charging and H2 fueling at scale**
- Renewables, energy storage integration and resilient microgrids
- Extensive industry & utility relationships
- **Focus on speed, safety, and quality**

1,525+
EV Charging Sites Deployed

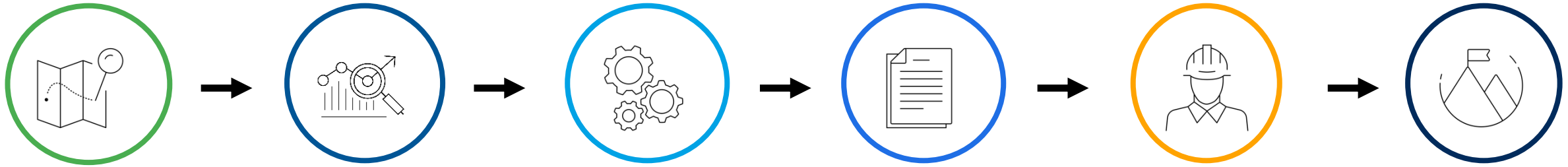
100+ MW
Transit & Fleet Charging Engaged

150+
Behind-the-Meter Battery Installations

25,000 MW
Solar Capacity Installed

Fleet Electrification Journey

Black & Veatch meets you where you are, and partners through every stage to manage a complete, turnkey program while keeping an eye on your bottom line



Strategy & Planning

- Market view
- Provider landscape
- Value proposition by market
- Economic modeling
- Deployment strategy
- Use case evaluation

Deployment Plan

- Prioritize sites based on local incentives/energy prices
- Deal strategy for suppliers
- Investment planning
- Program management for electrification deployment

Prelim. Feasibility & Design

- Detailed site assessment
- Grid capacity check & load letter submission
- Site transportation operations survey
- Go/No-Go decision on site

Detailed Engineering

- Engineering designs
- Zoning and permitting research, submittal, and approval
- Utility interconnection
- Procurement & purchasing
- Inventory Control
- Qualify and manage subcontractors

Construction & Commissioning

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

Operation & Maintenance

- Site turn-over
- Testing and training
- Startup and commissioning
- Project closeout
- Alarms and monitoring
- Infrastructure management

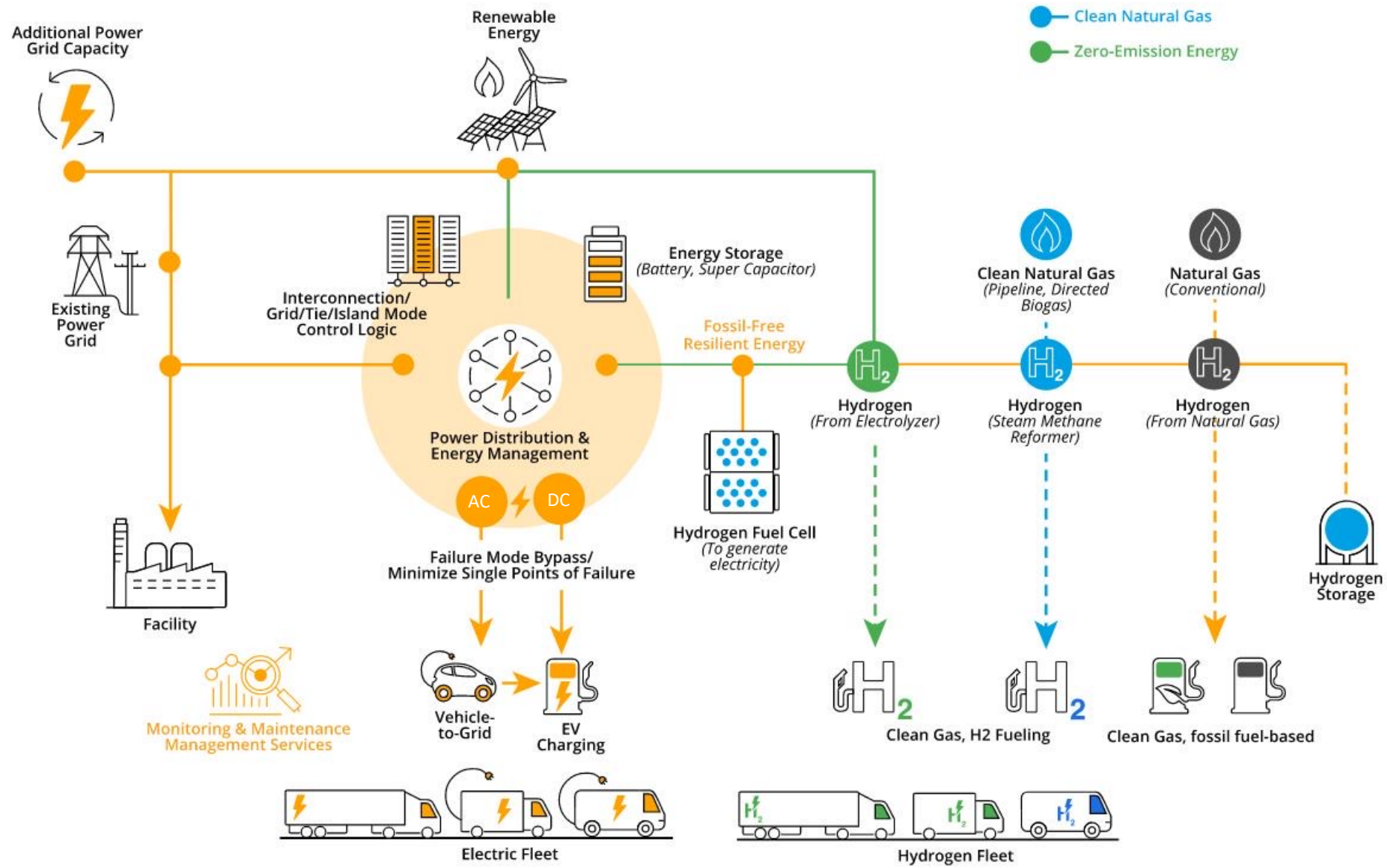
Multi-Fuel Energy Hub

Clean, resilient, sustainable, scalable, cost-efficent power and energy

- Consideration of Geography and Resource Availability to Determine Best Mix of Energy Generation and Storage Requirements
  = Maximize Economy and Resiliency
- Potential Subscription-Based or Co-location Business Model for Zero-Emission Vehicle Fueling, Energy-As-A-Service
  = Predictable Cost
- EV Charging Network and Energy Management System Integration
  = Cost-Efficient Operation
- Value Stack Hydrogen Generation, Clean Fossil Transportation Fueling, EV Charging, and Facility Power
  = **Diverse Resources, Operational Availability, and Map to Achieve Sustainable Zero-Emission Energy**

Utilize existing electrical grid and/or new power to achieve diverse, highly available energy source at the magnitude needed for relevant impact

Multi-Fuel Energy Hub



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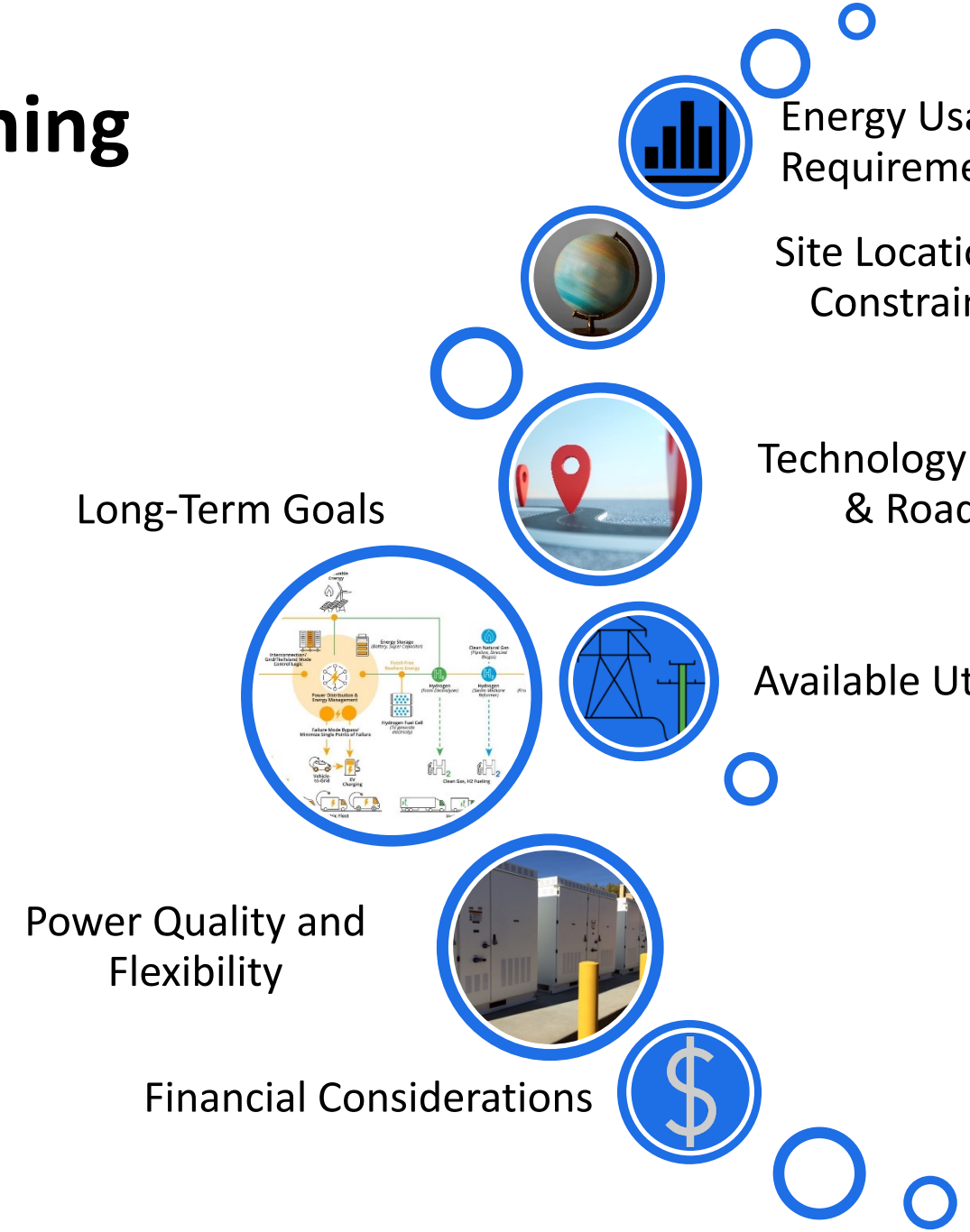
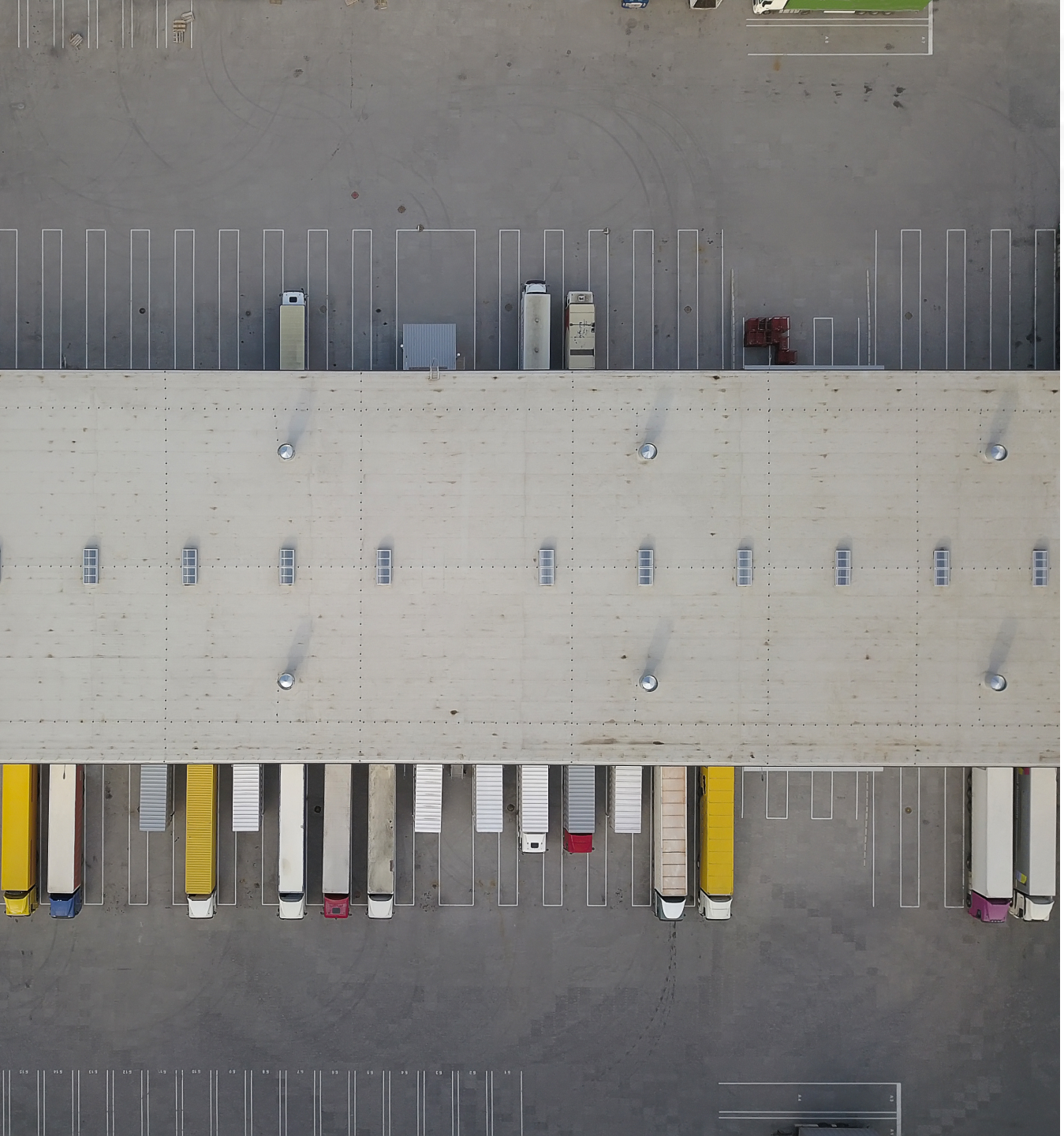
Self-Sustaining Zero Emission Transportation and Energy Considerations

- Reduction in Pollution
  - Healthier people
  - Reduced healthcare costs
- Economic & Societal Benefits
  - -Variety of career opportunities
  - -Education and workforce training programs aligned with industry needs
- Geopolitical Benefits
  - - Renewable energy produced locally and regionally reduces global conflict
  - - Demonstrate world leadership in environmentally friendly industries accessible to all
  - - Establish new and revitalize existing global trade opportunities, peace through trade

Planning



Planning process should include a comprehensive review of ***current state, future goals*** and growth expectations, and deliver a ***roadmap*** for technology selection and implementation to provide a ***no regrets strategy*** for energy transition to clean, reliable, resilient power that gives you ***greater control*** over future energy cost.



Use Cases

- Loads/Routes
- Vehicle Types
- Schedule
- Facility Energy Forecast/Critical Loads
- Telecom/Data

Technology Considerations

- Fuel Types
- Water Sources
- Decarbonization/Sustainability Mandates
- Available Incentives
- Reliability, Resiliency, Optimization

Timeline Considerations

- Economic Payback Schedule
- Corporate/Regulatory Timelines
- Technology Conversion Schedule
- Component Technology Maturity

Questions?

Contact Us

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