# E3's Asset Valuation and Markets Practice Area

Overview of Key Capabilities and Qualifications

H1 2025



### Who is E3?

Technical & Strategic Consulting Specializing in the Energy Transition

130+ full-time consultants

30+ years of deep expertise

Degrees in Engineering + Economics + Mathematics + Public Policy











San Francisco

**New York** 

**Boston** 

Calgary

Denver

#### E3 Clients

### **Asset Classes Supported by E3**

350+ projects per year across our diverse client base





**Utilities** 



**Thermal Resources** 



**Transmission** 



**New and Emerging Technologies** 



Electric Vehicles and Infrastructure



**Data Centers and Other Large Loads** 



**Decarbonized Fuels** 



Energy Storage



**On/Off-Shore Renewables** 



Distributed Generation and Flexible Loads

### Who is E3?

#### **Our Practice Areas**

- + E3 is the largest consulting firm focused on the clean energy transition in North America
- + E3 is a recognized thought leader on decarbonization and clean energy transition topics
- + E3 has three major practice areas covering energy systems from bulk grid to behind the meter



## Climate Pathways & Electrification

- Long-term energy & climate scenarios
- Electrification and lowcarbon fuels analysis
- Future of gas



## Asset Valuation & Markets

- Energy market price forecasting
- Strategic advisory
- Due diligence
- Market design
- Transmission planning



## Integrated System Planning

- Electric system planning: reliability and resource analysis
- Planning for utility and state RPS + GHG targets
- Utility planning and procurement decisions

**Economy-Wide Energy Systems** 

**Bulk Grid Power Systems** 

Grid Edge / Behind-The-Meter

















# E3's Asset Valuation Practice Uniquely Leverages Best-in-Industry Technical Learnings Across the Firm

# Integrated System Planning

Developing technically robust solutions and road maps for the safe, reliable, and least cost implementation of the clean energy transition including determining capacity, energy and reserve requirements, and providing full-suite system planning services (generation, transmission, distribution, customer programs)

## Asset Valuation and Markets

Balancing supply and demand at all levels of the market to forecast the impact of the clean energy transition on assets, portfolios and businesses

(market evolution, transmission value, project economics, pricing forecasts, strategy and risk analysis)

# Climate Pathways and Electrification

Best-in-class modeling of end-use transformation required by decarbonization across all sectors including load forecasts, technology implications, and economic and affordability impacts

Technical insights and understanding form the basis of our market views

### **Asset Valuation and Strategy Practice Area**

- + The Asset Valuation and Strategy practice area works primarily with project developers, asset owners, and investors
- + Insights informed by work being done across the firm that provides a unique 360-degree perspective of rapidly evolving markets
  - Clean Energy Policy → how will policy change the playing field for different resources?
  - Planning → what resources will power the grid in 2030? 2050?
  - Market Analysis → how will market prices evolve in the grid of the future?
- The E3 Asset Valuation and Strategy team provides a broad and deep range of analytical support tailored to client needs for strategy, planning, development, and financing.

#### Typical services include:

- Transaction support and due diligence (buy side and sell side)
- Strategy formulation and market entry
- Board-level reports on market outlook and asset performance
- Customized forward-market price projections incorporating impacts of policy and technology changes
- Revenue stream/benefits analysis, for asset or portfolio



#### **Asset Valuation / Strategy**

- Analyze asset value from multiple perspectives in vertical, bilateral, and wholesale markets
- Strategic support for project development, acquisition, and operation, including market entry
- Proprietary in-house models and in-depth knowledge of public policy, regulation and markets

- Production cost simulation using in-house proprietary tools or customized commercial software
- Project site evaluation
- Off-taker assessments
- Basis spread assessment
- Wholesale market rules and bidding strategies

### E3's Comprehensive and Best-in-Class Modeling Toolkit

Market-Level

#### **PLEXOS**

PLEXOS

Granular operational simulations for market price forecasts

#### **PATHWAYS**



Economy-wide accounting of potential role for emerging technologies in the energy transition

#### RECAP



System-wide reliability assessment and resourceby-resource assessment of capacity value

#### **RESOLVE**



Optimal capacity expansion for electric systems, including emerging technology candidates

Project-Level

#### **RESTORE**



Optimizes energy storage value stack via operations

#### **REMATCH**



Evaluates marginal emissions and final electricity demand costs

#### **RECOST**



Forecasts of the total financed cost of emerging technologies

## Electrolytic Fuel Calculator



Technical cost analysis of electrolytic fuel production through electrolysis

### **Recent Public Transaction Support**



E3 supported **Brookfield**Renewable Partners in its
acquisition of the U.S.
onshore renewables business
of National Grid
Renewables for an
enterprise value of \$1.7
billion.



E3 served as market advisor to **Baseline Energy Services**, a provider of low-carbon and mobile distributed power generation solutions, on its sale to **Pennybacker**.



E3 supported **Brookfield Renewable Partners** in their acquisition of **Duke Energy Renewables** for \$1.05 billion in equity proceeds.



E3 acted as market advisor to KKR on the establishment of its \$2 billion strategic partnership with Hannon Armstrong Sustainable Infrastructure Capital, Inc. (HASI)



E3 served as power market advisor to Global Infrastructure Partners (GIP) on their acquisition of Eversource's stake in the South Fork and Revolution offshore wind projects.



Key market and strategic advisor to Blackstone Infrastructure Partners on \$2.15 billion acquisition of minority equity interest in Northern Indiana Public Service Company



Key market and strategic advisor to Macquarie Infrastructure and Real Assets / Ontario Teachers' Pension Plan consortium in their investment into Puget Sound Energy



Key market and strategic advisor to InfraRed Capital Partners in their investment into a portfolio of Texas and Nevada transmission assets



Key market and strategic advisor to **Ontario Teachers' Pension Plan** in their acquisition of certain **NextEra** assets



Key market and strategic advisor to **Amber Infrastructure Group** in their investment in low carbon fuels (RNG and ethanol)



Key market and strategic advisor to **Generate Capital** in their investment in a battery energy storage platform (esVolta)



Hydrogen emissions accounting analysis for the American Council on Renewable Energy (ACORE)

- E3 works closely with all types and sizes of developers, investors, and utilities across North America from the smallest to the largest under all ownership structures
  - Our utility work spans C-suite / Board strategy to utility resource planning, program costeffectiveness analysis, ratemaking, and regulatory filing support, all of which support our expertise in transaction contexts
- + E3 also supports many utility regulators and key stakeholders
  - We have been trusted consultants for many years to numerous state regulatory commissions and agencies (e.g., the California Public Utilities Commission and the New York Department of Public Service)
  - We also work for several key utility stakeholders such as environmental and non-profit groups



# Summary of E3 Service Offerings Related to Data Centers Across our Broad Client Base



Data Centers, IPPs, & Investors



Regulators & Policymakers



Utilities & ISOs/RTOs

- Strategic and tactical support on data center siting, power supply options / configurations / economics including wholesale market price forecasting, operations, financing options, tariff / contract negotiation, etc.
- Digital and power infrastructure transaction / diligence support
- Regulatory / stakeholder support at the state and federal level including ISOs/RTOs ranging from expert witness testimony, filed economic analyses, public whitepapers, etc.

- System planning and grid impact analysis around data center load growth
- Ratepayer impact /affordability analysis associated with data center load growth
- Policy analysis associated with data center specific incentives, various power supply requirements, changes to market design, and other relevant policies
- Proceeding support on data center specific issues such as novel utility proposals

- Rate, tariff, and/or contract design and negotiation support
- Data center load forecasting and interconnection process improvement support
- Integrated resource / system planning and bid evaluation
- Regulatory/stakeholder support
- Execution, marketing, and/or site selection support
- Reform / innovation support for new approaches to financing, cost recovery, rate design, power supply, market design, etc.

## **Thank You**

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