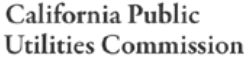




# Data Needs and Innovative Market Opportunities

June 21, 2023

# Tierra's Data Insights, Challenges, and Opportunities

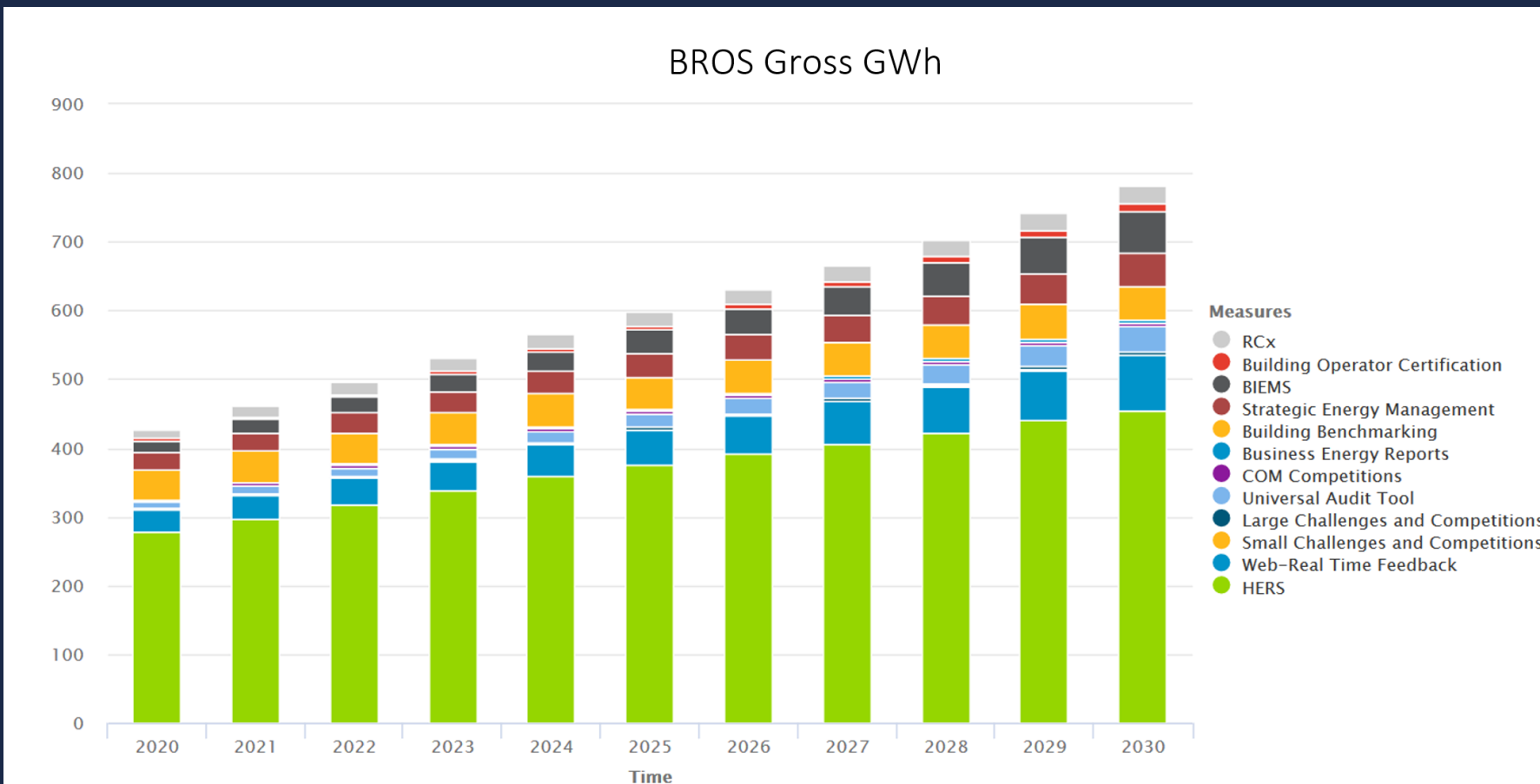


Northeast Energy Efficiency Partnerships



# Opportunities to Integrate and Coordinate Data Across Industry Organizations, Studies, Sources, etc.

Groups A and D Nexus on BROS (820 GWh in 2020)

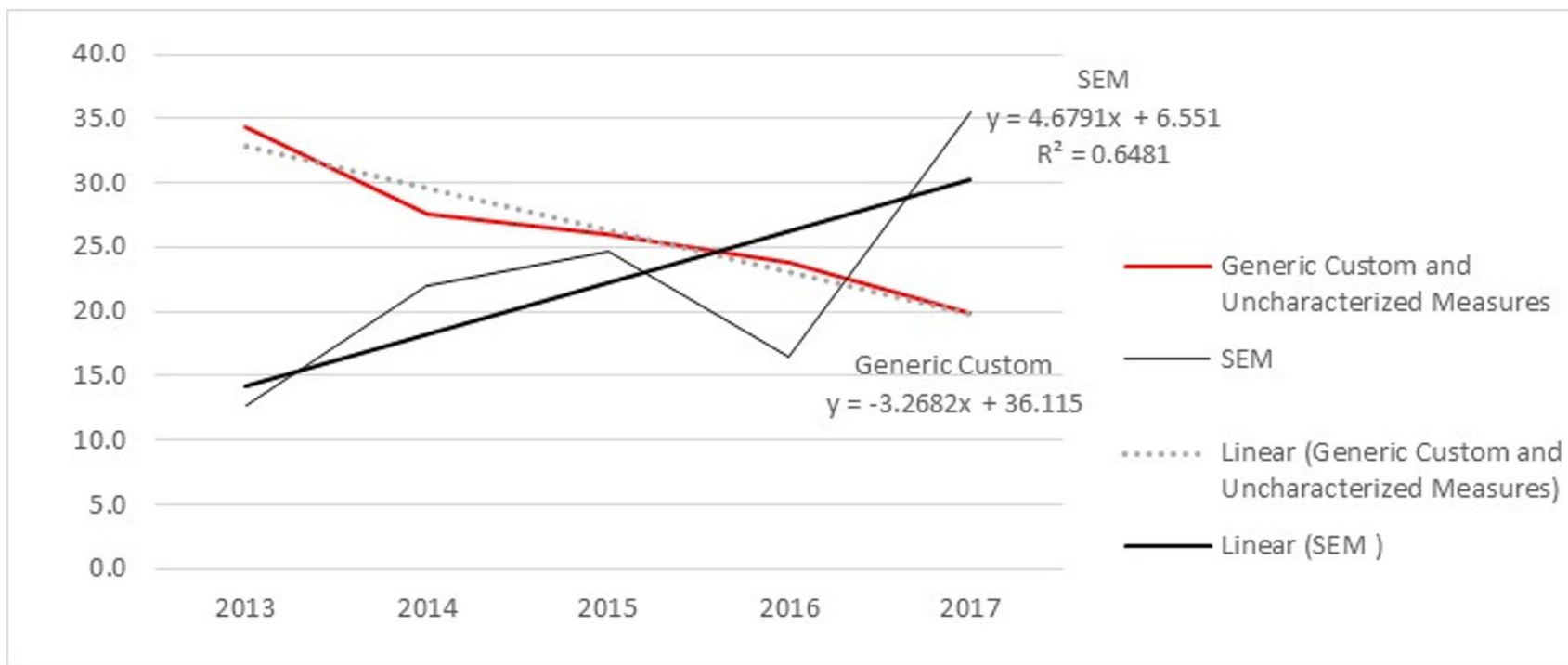


- Most BROS measures are large and small commercial
  - Group D Deliverable 27: Behavioral, Retrocommissioning and Operational Program Impact and Best Practices Study
- Most BROS savings are residential (e.g., HERS).
- BROS uncertainty includes CA specific values for UES, EUL, Costs

# Opportunities to Integrate and Coordinate Data Across Industry Organizations, Studies, Sources, etc.

Group D Nexus on Generic Custom and SEM

Historic Trends in SEM and Generic Custom Net Claims



- Many SEM forecast values are based on external or dated studies (e.g., UES by Market Segment, EUL, Incremental Costs, kW forecasts, etc.)
- Potential to refine forecast parameters within existing deliverable groups
- Opportunities to integrate data sources, analyses findings, etc. of broader Evaluation Groups within eTRM

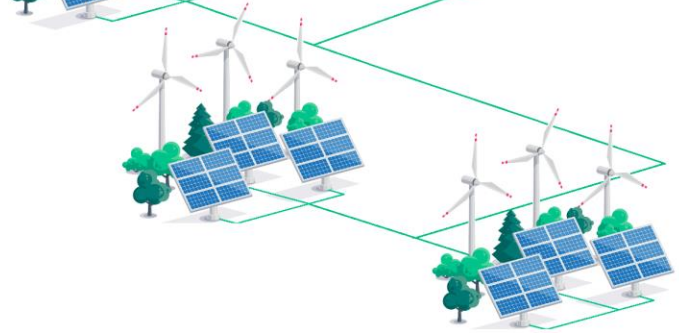
# Cybersecurity is the Foundation for a Flexible, Responsive, Reliable, etc. Grid of the Future

Coal-Fired Plants

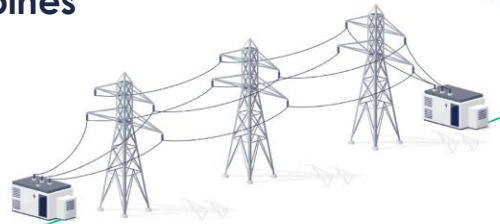
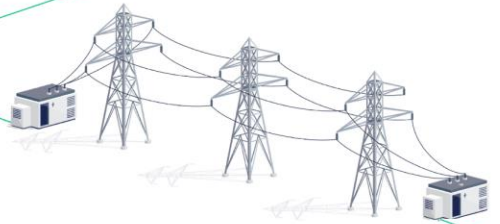
Nuclear Fleet



NG Combustion Turbines



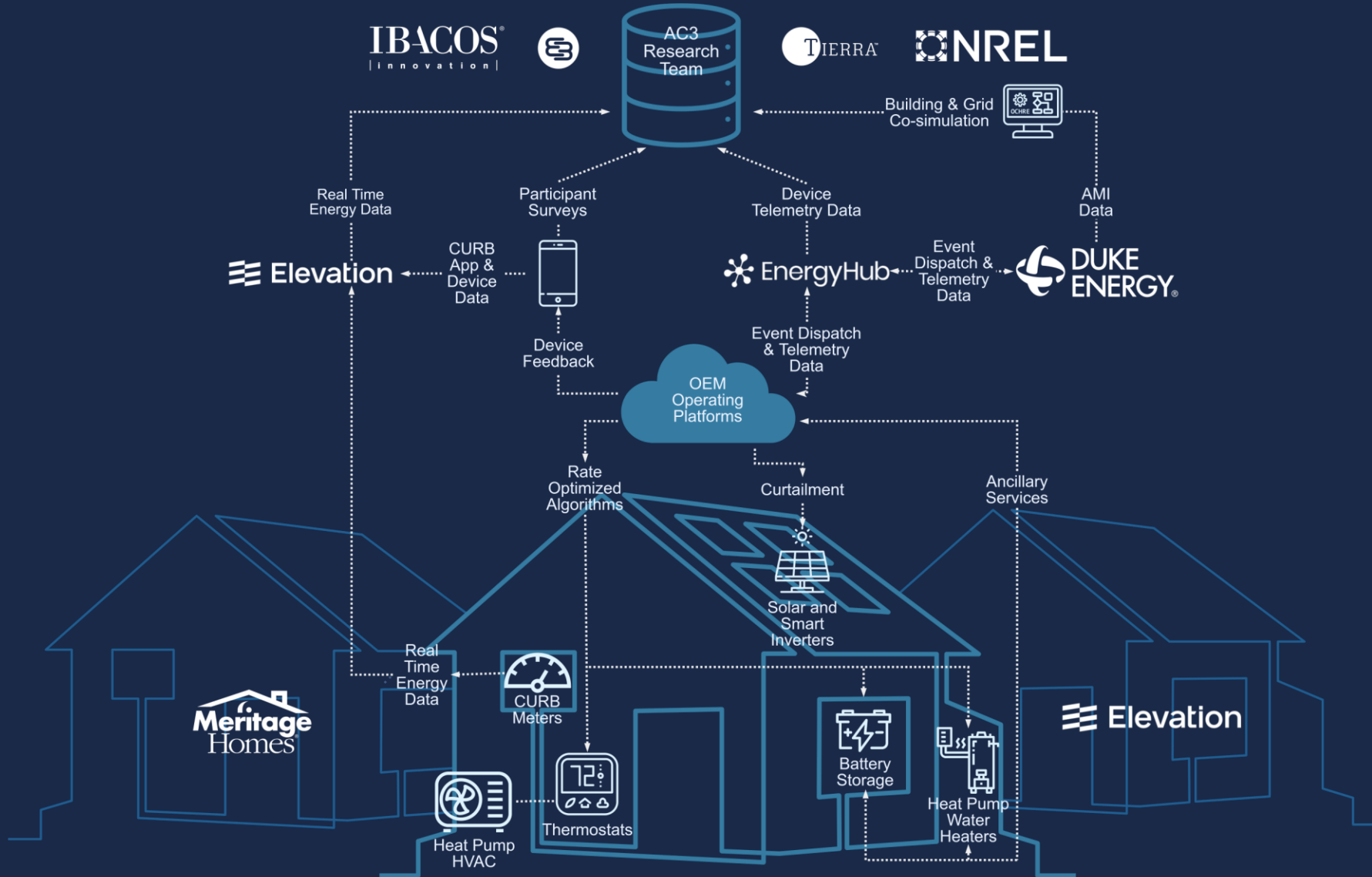
20,000 MW of New Renewables Capacity



CLR Technology & Control Pairings



# [Targeted and Pragmatic] Cybersecurity is the Foundation...



# Appendices

# Tierra's Primary Practice Areas



## Strategy

- Strategic Planning
- Portfolio Optimization
- Portfolio Evaluation



## Research

- Technology Assessments
- Potential Studies
- Customer/Market Research



## Delivery

- Program Design
- Implementation Support
- End User Services



## Evaluation

- Impact Evaluation
- Process Evaluation
- Customer Experience



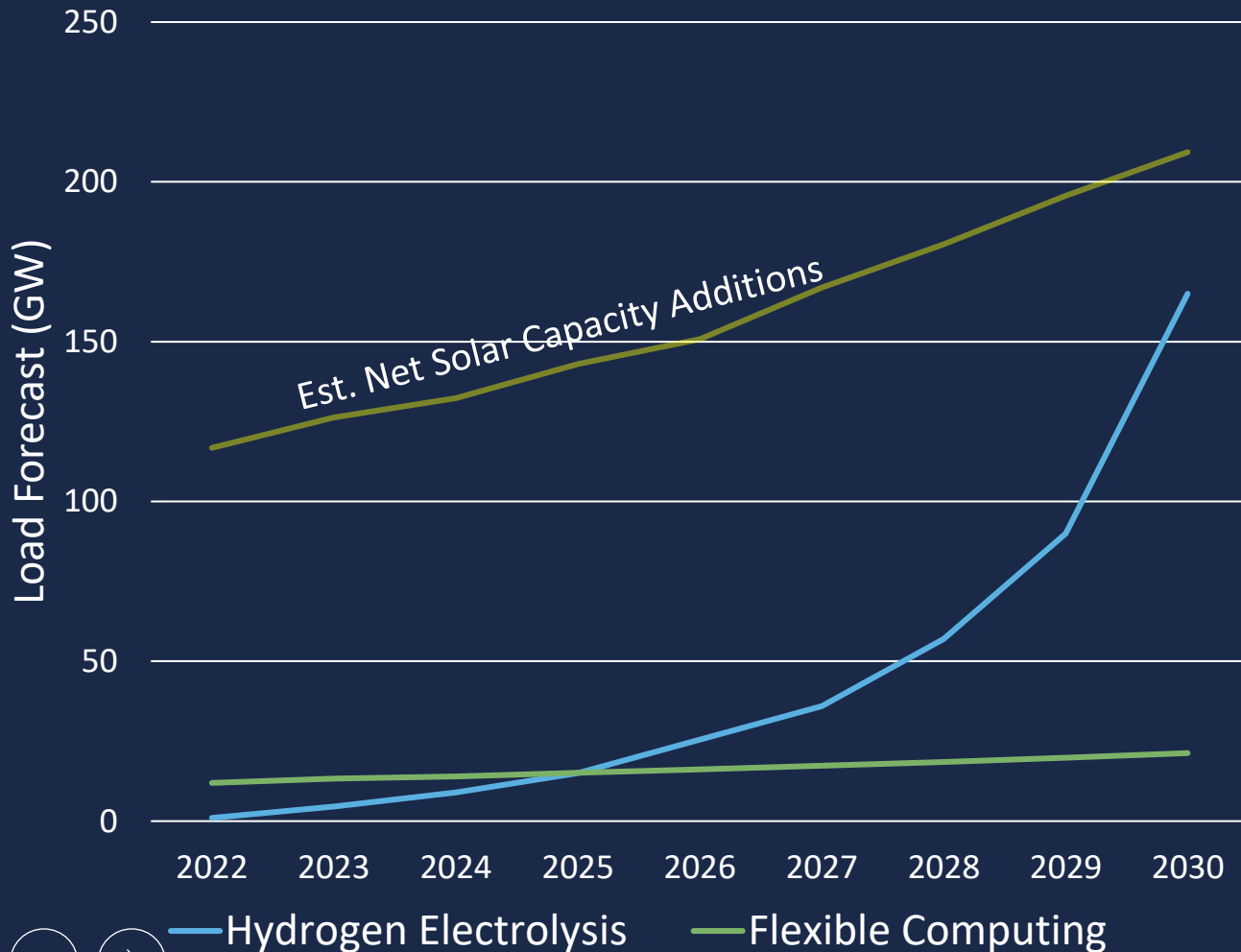
## Sustainability

- Climate Action Planning
- Corporate & ESG Services
- Utility Carbon Management



# Controllable Load Resource (CLR) Market Forecast

Figure 1. CLR Global Load Forecast (GW)



- Quickly Modulate Demand in Response to Control Signals
- Offer Prescient and Impactful Grid Benefits
- Leverage and Incorporate Strategic Insights from the Growth of Renewables
- Align and Coordinate Diverse Resource Mix with Uniform Communication Standards