

PANEL 2: Energy Resources Panel Description

The industrial energy managers toolkit to reduce energy costs has rapidly expanded from energy efficiency to include demand response, peak load management, distributed energy resources, and energy storage systems. The goals for the industrial manager have also expanded, from the charge to reduce energy costs to now include reducing greenhouse gas emissions, improving reliability in the plant, and serving as a power resource to the broader electric grid. Underlying this rapidly changing landscape is a nagging doubt: do we even know how to decarbonize industry, exactly? And where we don't know how to do it? How is industry to make massive capital investment bets today, accounting for unknown technology innovations to come let alone the geopolitical risks of energy resources we know? This panel may address these ideas and topics:

- Industrial facilities as an electric system resource, including on-site generation and storage hosting, providing energy exports, capacity contributions, synchronous reserves, industrial load, and demand flexibility.
- Industrial demand response technologies, programs, and policies
- Industrial electrification technologies, programs, and policies.
- Low-carbon fuels, including green and blue hydrogen.
- Waste heat recovery and industrial heat pump technologies and applications.
- Electric transmission and distribution infrastructure barriers and constraints to electrification.
- Industrial microgrid examples and potential.
- Supply chain bottlenecks to existing or emerging energy technologies.
- Corporate trends, goals, and management practices regarding fuel and energy resource preferences.
- Green-house gas and carbon emissions strategies with energy resourcing.