

Powering the People 2021

ACHIEVING A CARBON FREE ENERGY FUTURE

Key Takeaways (Dialogue #2): Rethinking Energy Efficiency as a Carbon Resource

In November 2021, the Institute for Electric Innovation's ***Powering the People 2021: Achieving a Carbon Free Energy Future*** brought together over 100 industry leaders from electric companies, major customers, environmental organizations, technology companies, regulators, and other stakeholders for two dialogues focused on emerging issues in the electric power sector.

The second dialogue focused on rethinking energy efficiency as a carbon resource.

- Ralph Cavanagh of the Natural Resources Defense Council provided opening remarks.
- Gene Rodrigues of ICF moderated a discussion with: Charlotte Mitchell of the North Carolina Utilities Commission; David Nemptow of the U.S. Department of Energy, Building Technologies Office; Matt O'Keefe of Oracle Utilities; and Katie Sloan of Southern California Edison.

Key takeaways are summarized and highlighted below.

[Click Here for the Agenda and Speaker Bios](#)

Energy efficiency is a foundational part of the carbon-efficient tools and technologies delivering immediate, sustained, and targeted carbon emissions reductions today and into the future.

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NRDC recognizes energy efficiency as a major contributor to the carbon dioxide emissions reductions achieved by the power sector between 2007 and 2019 as the U.S. economy grew and electricity consumption remained flat.

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Oracle describes findings from a recent Brattle report showing that, in aggregate, demand side actions by customers (e.g., energy efficiency, electric vehicle adoption, and end-use electrification) will account for nearly twice as much GHG emissions reductions by 2040 as supply-side investments alone.

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Southern California Edison explains that doubling energy efficiency program savings by 2030 is a core component to SCE achieving its carbon reduction goals and how a recent CPUC decision places the GHG emissions reductions achieved by energy efficiency programs on equal footing with energy savings achieved via the new total system benefits (TSB) metric. This is a major paradigm shift.

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NRDC emphasizes several analyses showing that, as we move to decarbonization of the energy system, the value of energy efficiency only goes up. In addition, as we move to electrify transportation, now is the time to focus on increasing the fuel economy of electric vehicles (miles per kWh).

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Gene Rodrigues announces big EE news from NARUC! Chairman Mitchell describes NARUC's recent adoption of a resolution focused on energy efficiency as a carbon resource. The four principles in the resolution include: maximize EE programs to cost effectively achieve decarbonization goals; leverage utility relationships with customers; design tools to better reflect the costs and carbon impacts of EE programs; and explore options for providing real-time energy consumption data to customers.

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The Department of Energy emphasizes the importance of grid interactive efficient buildings to meet decarbonization goals. Buildings are the largest energy consuming sector in the U.S. and 74% of U.S. electricity is consumed by buildings. The stakes are gigantic! Efficiency is a kW operation and a CO₂ operation, not just a kWh or therm operation. We need to make buildings as sexy as EVs.

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NRDC explains the importance of recent changes in the tax code (section 179D) that provides a permanent tax incentive for energy efficiency for new and remodeled commercial and multi-family buildings. Now, to take advantage of this, we need regulatory guidance from the IRS and U.S. DOE.

Customer action remains central to scaling energy efficiency programs; customer energy management solutions work best when presented simply.

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Oracle notes that making EE solutions simple for customers is critical to achieving decarbonization goals. To achieve significant carbon emissions reductions, we need to think about how and when we ask customers to take action. The value of EE is shifting to "EE Plus" but we recognize that EE is the foundation for demand flexibility.

 [Video Clip Here](#)

Chairman Mitchell suggests real-time consumption data can help customers begin to think about how their actions are impacting the power system including what benefits their actions are providing. In addition to costs, customers want to know how what they are doing affects the power system and we need to make that information accessible.

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Southern California Energy shares results from the first year of their Clean Energy Optimization Pilot. SCE is working with university campuses and making all energy resources and programs available to reduce GHG emissions. Universities receive GHG incentives based on which technologies they adopt (not which programs they join). To-date, more than \$4M in incentives were awarded to universities for GHG reductions based on technologies deployed. Southern California Edison is eager to develop a similar GHG incentive program for residential customers.

Additional Resources

Check out the links below for materials referenced during the dialogue!

- [IEI's "Rethinking Energy Efficiency as a Carbon Resource"](#)
- [NARUC Resolution on Increasing the Role of Energy Efficiency in Achieving Cost-Effective Energy Supply and Decarbonization](#)
- [Oracle & The Brattle Group's "The Customer Action Pathway to National Decarbonization"](#)
- [SCE's Clean Energy Optimization Pilot Year 1 Annual Report](#)
- [U.S. Department of Energy's "A National Roadmap for Grid-Interactive Efficient Buildings"](#)

Check Out the [Key Takeaways Here](#) for "Advancing Carbon-Free Energy Solutions for Corporate and Federal Customers"

Thanks to our supporting organizations!

