INSTITUTE FOR ELECTRIC INNOVATION

2022 ANNUAL REPORT



Message from the Executive Director

Throughout 2022, the Institute for Electric Innovation (IEI) focused primarily on three key issues shaping the future of the electric power sector – rethinking energy efficiency as a carbon resource, corporate customer sustainability solutions, and engaging residential customers with technology – through its major initiatives including:

Adam Cooper Executive Director

- Hosting its signature annual event, Powering the People 2022: Customer Partnerships Driving the Future of Energy.
- Hosting a series of Thought Leader Executive Dialogues focused on Engaging Customers with Technology.
- Hosting a workshop series with corporate customers, electric companies, and the World Resources Institute focused on Designing 100 Percent Carbon-free Energy Solutions.
- Holding educational briefings at the Winter and Summer NARUC Policy Summits.
- Publishing a series of fact sheets on trends in clean energy and smart meter deployments.

IEI's executive dialogues, events, and reports help to define opportunities for the industry and identify how the industry is finding solutions for its customers. We look forward to continuing this important work in 2023! - Adam Cooper, Executive Director

Powering the People: Customer Partnerships Driving the Future of Energy

In October 2022, IEI held its signature Powering the People event which brought together approximately 100 industry leaders from electric companies, environmental organizations, technology companies, corporate customers, policymakers, regulators, and other stakeholders to explore two key issues:

100% Carbon-free Energy Solutions: Preferences, Challenges, and Pathways Forward

- Lisa Wood, Vice President of Customer Solutions, Edison Electric Institute, kicked off the session with remarks about the importance of utilizing all available carbon-free energy resources on the table, both on the supply and demand side, to get to a clean energy future in an affordable and reliable way.
- Mary Kipp, President and CEO of Puget Sound Energy and Co-Chair of IEI, moderated a discussion with Meta, NV Energy, and Xcel Energy about corporate customers' initiatives and procurement strategies to pursue 100% carbon-free energy solutions and the role of electric companies to provide clean and reliable energy.

Technology to Engage Customers and Drive Business and Climate Outcomes

- Adam Cooper, Executive Director of IEI, kicked off the discussion with remarks focused on how the evolution of digital technologies and the rise of big data have changed customer engagement and created new opportunities and value streams for customers and electric companies.
- Bob Rowe, CEO of Northwestern Energy and Co-Chair of IEI, moderated a discussion with ComEd, Google, Uplight, and Xcel Energy on how technologies and data are enabling electric companies to deliver personalized products and services to customers and help drive customer participation in 'winwin' energy and carbon management programs.

Key Takeaways from Powering the People 2022 can be found here: http://bit.ly/3VFoFdv



IEI NARUC Briefings

Environmental and Energy Justice: Ensuring Affordable, Reliable, Clean Energy and A Clean Environment for All

In February 2022, IEI hosted an educational briefing at the NARUC Winter Policy Summit on how electric companies are streamlining access to energy assistance for customers in need, providing energy management programs and access to clean energy to low- to moderate-income customers, and ensuring that electric transportation charging infrastructure is available in underserved communities.

100% Carbon-free Energy Solutions for Corporate Customers: Moving from Annual to Hourly Matching

In July 2022, IEI hosted an educational briefing at the NARUC Summer Policy Summit on 100% carbon-free energy (CFE) solutions most important to customers, critical data needs, regulatory considerations, as well as 100% CFE offerings currently available. The discussion also covered how well-designed 100% CFE solutions can provide benefits to both the subscribing customers and to all customers on the system.

IEI Thought Leaders Speak Out: Engaging Customers with Technology Dialogue Series

In 2022, IEI hosted two Thought Leaders Speak Out dialogues to bring together electric company executives with customer responsibilities and specific technology companies to share lessons learned from using technology to successfully engage with residential customers. The dialogues covered the following:

- In May, NV Energy and Bidgely led a discussion on using smart meter data analytics to identify and target customers for NV Energy's energy efficiency programs and using the call center tool to diagnose energy use problems and deliver personalized service for customers. Key Takeaways: <u>http://bit.ly/3Ff4QnS</u>
- In September, Southern California Edison and GridX led a discussion on SCE's analytics-driven and customercentric journey to transition customers to time-of-use (TOU) rates. More than 600,000 commercial customers and 2.6 million of SCE's 4.5 million residential customers are now on a TOU rate. Key Takeaways: <u>http://bit.ly/3GVQz0I</u>

Learn more about IEI's Thought Leaders Speak Out Dialogues: <u>https://bit.ly/3nr4262</u>

IEI Executive Dialogue

Advancements in Customer Energy Solutions and Services for a Clean Energy Future

In June 2022, IEI held its annual Executive Dialogue. Twenty-four senior electric company and technology company leaders gathered in Orlando to discuss emerging topics related to the role of technology and data in providing customer solutions and services. The discussion addressed personalizing solutions for low-to moderate-income customers, leveraging data-driven customer engagement, and creating more value through 'as-a-service' subscription offerings.

IEI Reports, Initiatives, and Issue Briefs

Carbon-Free Energy Initiative with World Resources Institute

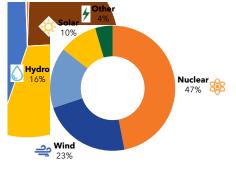
In December, IEI released "Designing 100 Percent Carbonfree Energy Solutions: Preferences, Challenges, and Pathways Forward," an issue brief that explores the current state of corporate customer demand for time-matched 100 percent carbon-free energy solutions, the attributes of these solutions that matter most to customers, challenges with scaling these solutions to a broad base of potential subscribers via a regulated tariff offering, design considerations, and the data needed to design, evaluate, and implement CFE solutions. The issue brief summarizes the discussions and learnings from a series of workshops convened by IEI and the World Resources Institute with corporate customers and electric companies in the first half of 2022. https://bit.ly/3VTSTcl

Facts "At a Glance"

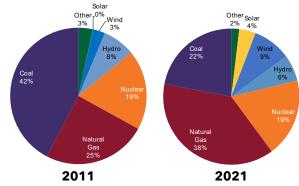
In April, IEI released its updated "Electric Companies are Committed to a Clean Energy Future," a fact sheet showing that electric power sector carbon dioxide emissions were 36 percent below 2005 levels at the end of 2021; that electric power sector carbon dioxide emissions are now 14 percent below transportation sector emissions; and that 40 percent of all electricity generated in the U.S. in 2021 came from carbonfree energy sources like nuclear, hydropower, wind, and solar. http://bit.ly/3VtJB7t

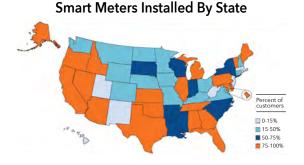
In April, IEI released its updated "**Smart Meters at a Glance**," a fact sheet showing that by the end of 2022, electric companies will have installed 124+ million smart meters and that 78% of U.S. households will have a smart meter. <u>http://bit.ly/3Po9G5G</u>











U.S. Electric Companies Are Innovating to Provide the Solutions and Options that Customers Want

In April, IEI authored, "U.S. Electric Companies Are Innovating to Provide the Solutions and Options that Customers Want", an essay included in U.S. DOE/Berkeley Lab's Future Electric Utility Regulation series report "The Role of Innovation in the Electric Utility Sector." IEI's essay described how U.S. investor-owned electric companies are using new technologies, data analytics, and partnerships to provide innovative energy services and solutions to residential customers and carbon-free energy solutions to corporate customers. The essay also explores regulatory approaches that are needed to support new services and solutions for customers in the future.

Members of the Institute for Electric Innovation and the Edison Foundation

IEI's members are the investor-owned electric companies that represent about 70 percent of the U.S. electric power industry. Membership is open to all electric utilities, including investor-owned utilities, public power utilities, electric cooperatives, and international utilities. The Institute for Electric Innovation is a program of the Edison Foundation. Contributions to the Edison Foundation and its programs are tax deductible in the same manner as contributions to any 501(c) (3) organization.

- AES Corporation
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- El Paso Electric
- Entergy Corporation
- Evergy
- Exelon Corporation
- Florida Public Utilities
- Green Mountain Power Corporation
- Hawaiian Electric Industries
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IEI Management Committee

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Warner Baxter Executive Chairman Ameren Corporation

Robert Blue President and CEO Dominion Energy

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Kevin Payne President and CEO Southern California Edison

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David Velazquez Executive Vice President, Utility Operations Exelon Corporation

Dennis Vermillion President and CEO Avista Corporation

IEI Technology Partner Roundtable







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About the Institute for Electric Innovation

The Institute for Electric Innovation focuses on advancing the adoption and application of new technologies that will strengthen and transform the energy grid. IEI's members are the investor-owned electric companies that represent about 70 percent of the U.S. electric power industry. The membership is committed to an affordable, reliable, secure, and clean energy future. IEI promotes the sharing of information, ideas, and experiences among regulators, policymakers, technology companies, thought leaders, and the electric power industry. IEI also identifies policies that support the business case for the adoption of cost-effective technologies. IEI is governed by a Management Committee of electric industry Chief Executive Officers. In addition, IEI has a select group of technology companies on its Technology Partner Roundtable.

About the Edison Foundation

The Edison Foundation is a 501(c)(3) charitable organization dedicated to bringing the benefits of electricity to families, businesses, and industries worldwide. Furthering Thomas Alva Edison's spirit of invention, the Foundation works to encourage a greater understanding of the production, delivery, and use of electric power to foster economic progress; to ensure a safe and clean environment; and to improve the quality of life for all people. The Edison Foundation provides knowledge, insight, and leadership to achieve its goals through research, conferences, grants, and other outreach activities.



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