

Report on 2023 Activities and Update

Advancing the commercialization of breakthrough clean energy technologies is a top priority for America's electric companies and other key stakeholders. Building on the foundation laid by the Carbon-Free Technology Initiative and other industry initiatives, the Edison Foundation launched the Institute for the Energy Transition (IET) earlier this year—a new program that will assess the key 24/7 zero-emitting technologies necessary to achieving carbon emissions reduction goals reliably and affordably.

These key technologies include long-duration energy storage (LDES), advanced wind and solar energy systems, zero caron fuels such as hydrogen, advanced nuclear, and carbon capture, utilization, and storage (CCUS). IET's goal is to provide an assessment for each technology in the next year and then to engage in periodic updates to reflect significant developments, including scheduled deployments and improved economic fundamentals.

As part of its initial activities, IET has partnered with McKinsey to hold a series of one-hour webinars for the CEOs, starting with a three-part series on hydrogen held in February and March. The hydrogen series began with a "101" basic overview followed by two gradually more detailed sessions (e.g., a 202 and 303 level discussion). Following the hydrogen series, IET partnered with McKinsey on a webinar addressing LDES in April, which featured a robust dialog with CEOs and company technology leaders. Looking ahead, McKinsey will give a capstone presentation on key clean energy technologies to the CEOs as part of EEI 2023. In addition, IET will partner with McKinsey on a multi-part series of webinars on CCUS in July. We are also working with McKinsey to have them translate their work into technology-specific summaries that can be posted to the IET website.

IET has also engaged ICF to produce a report analyzing power sector emissions globally. We are working with ICF to translate some of their key findings into infographics and one-pagers that can be posted to the IET website, in addition to publishing the report ICF is preparing for us. Later this year ICF will brief the IET Board members on their findings and a dashboard they have developed for IET with country and sector specific data, including detailed information on US power sector emissions.

In March, IET announced a partnership with the Department of Energy, EPRI and the LDES Council to help advance the commercial deployment of long duration energy storage. The partners signed an MOU and have identified LDES-related activities for 2023, including possible events at COP-28, as well as other convenings to identify barriers to LDES deployment.

In April, Foundation Chair Gerry Anderson and IET Executive Director Eric Holdsworth recorded an episode for the Electric Perspectives podcast discussing the IET and its mission. The

IET staff team has also been hard at work designing and building the website, which will be launched soon.

Going forward, IET will continue to explore the demonstration of these key technologies, adding a new focus on the current economics of each technology, expected future cost curves and potential timelines for adoption. IET also will focus on identifying and proposing solutions to the legal, regulatory, and policy issues that must be addressed to ensure that these technologies can be deployed as soon as they are demonstrated and economically scalable.

Other initiatives IET will undertake include identifying critical barriers to deployment, providing accessible qualitative summaries of the current economics of key carbon-free technologies, summarizing takeaways from key demonstration projects underway or already undertaken domestically and abroad, and developing public education materials about these technologies, focusing on their costs and the key issues that need to be addressed to deploy them reliably and affordably.

Partnerships with experts and other stakeholders are crucial to the success of these efforts. In addition to the LDES partnership, IET will be working with industry-leading experts, including researchers from EPRI and DOE's National Labs, as well as electric company leaders, to achieve its goals. To this end, IET proposes to create an Advisory Committee of experts and other stakeholders, which will be approved by the Board. All IET work will continue to be directed by the Board.

Learn more about the Institute for Energy Transition

Learn more about the Carbon-Free Technology Initiative

Learn more about the Edison Foundation