Today, the Center for Law, Energy and the Environment (CLEE) at Berkeley Law and the Emmett Institute on Climate Change and the Environment at UCLA Law are releasing a new report, *Data Access for a Decarbonized Grid*, which highlights key policy solutions to expand access to the energy data needed to operate a fully decarbonized grid.

Join our webinar on Wednesday, April 7 at 10am PT to learn more.

As California approaches the <u>state target</u> of delivering 100 percent zero-carbon power by 2045, state leaders face the challenge of decarbonizing electricity by rapidly expanding the use of renewable energy sources. At the same time, they face <u>increasingly severe heat</u> waves and <u>wildfires</u> that threaten the <u>reliability</u> and <u>resilience</u> of the grid.

Individuals, businesses, and utilities are turning to a growing group of flexible grid technologies to meet this challenge—such as distributed renewables, small-scale battery storage, and smart appliances and building energy management. They are becoming increasingly mainstream and affordable. But these technologies, which facilitate the flexibility needed to deliver reliable power on a fully renewable grid, also rely on constant flows of energy data in order to operate effectively and efficiently.

The data include grid structure and operations data that depict system assets and capacity; customer-level data on consumption and rates; and real-time performance data for distributed generation and storage assets. Utilities, technology providers, and residents already exchange these data in abundant quantities. However, a set of regulatory, privacy, and incentive-based challenges limit the ability of regulators, utilities, and developers to generate and manage the data optimally.

These barriers include utility business and regulatory incentives that reward major physical capital investments over data management initiatives; potentially outdated rules restricting customer data-sharing; and concerns around cybersecurity and physical grid asset security.

To identify solutions to these challenges, CLEE and UCLA Law's Emmett Institute convened a group of energy data experts in August 2020, and our new report details the solutions including:

• Adopting performance-based regulation of electric utilities to provide financial

incentives for high-quality, efficient data generation and management.

- Re-examining the California Public Utilities Commission's 15/15 rule for customer data aggregation (which sets numerical limits on customer cohorts) and considering use of differential privacy methods instead.
- Modernizing utility IT systems to adapt to rapidly evolving technological and customer needs.

Ultimately, a fully decarbonized electrical supply will require a large-scale restructuring of the grid across generation, distribution, and consumption activities. In the face of growing threats to grid resilience and reliability, California energy leaders will have to help energy producers and consumers throughout the state gain access to the flexible grid technologies needed to maximize efficiency and minimize service disruption. Ensuring the optimal flow of energy data is vital to that effort.

You can access the report and its full set of recommendations here.

You can learn more about state priorities for increasing access to energy data by joining CLEE and the Emmett Institute for a <u>free webinar</u> on Wednesday, April 7 at 10am PT. California Energy Commissioner Andrew McAllister, clean energy expert Audrey Lee, and Sky Stanfield of Shute, Mihaly & Weinberger will discuss policy opportunities and technology needs to accelerate the transformation of the grid. RSVP here.