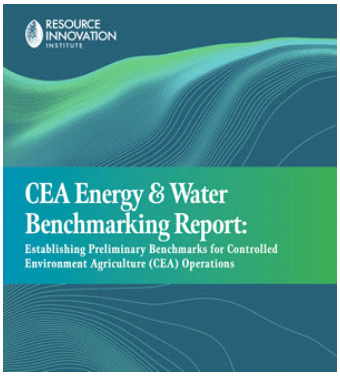
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Resource Innovation Institute's CEA Benchmarking Report

Jennifer Polanz



One of the biggest challenges in our industry is getting actionable data off which to benchmark what industry standards could be in CEA, whether that's for greenhouses or vertical farms. Many producers keep proprietary info on energy and water usage close to the vest, which is why it's pretty remarkable (and exciting) that some growers have chosen to share their data to create better benchmarking opportunities.

The reporting is based on standardized data using key performance indicators (KPIs) for CEA operations established within the Resource Innovation Institute's PowerScore benchmarking platform. A group of 12 operations across the U.S. growing a variety of crops participated in providing quantitative and qualitative data to measure their resource consumption and productivity.

"These aggregate, measured performance benchmarks are some of the first reported for the CEA sector," wrote the authors in the report. "They are not intended to be the final word or negate existing third-party benchmarks. They offer a group of measured, annual, industry benchmarks to help inform and reflect what can be expected in currently operating facilities."

Is it perfect? No, there are still factors that prevent receiving exact measurements. Is it building on what researchers have already provided with modeling? Yes, most definitely. And we want to congratulate the operations listed in the report who made the giant leap to provide the aggregated data used for these benchmarks.

And for the results? You should download and read the full report at Resource Innovation Institute (free with registration), but this tidbit shows the power of data:

"Though facilities differed in their water use efficiency, the highest-performing producers achieved greater than 90% water savings over field farming," the authors wrote. "PowerScore data on energy efficiency was consistent with published third-party benchmarks. Vertical farming can be energy intensive, though in some cases, has an energy consumption similar to that of many greenhouses."

Here's the link to download the report: catalog.resourceinnovation.org.