



# POWERSCORE CANNABIS TRACKING

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## WHAT IS POWERSCORE?

Developed and operated by non-profit organization [Resource Innovation Institute \(RII\)](#), [PowerScore](#) is an energy, waste and water-reporting and benchmarking data collection platform designed for many forms of controlled environment agriculture (CEA), including cannabis.

## CANNABIS RESOURCE BENCHMARKING

While cannabis production has a reputation for resource-intensity, the product's history as a Schedule 1 drug has prevented the industry from understanding exact resource consumption metrics. This is compounded by the patchwork of state-level legalization which has created dozens of markets across the United States, each held to different standards of production and environmental impact.

A key aspect of resource management and environmental protection is benchmarked data; understanding past and present resource intensity allows business, industry and government to identify areas for future improvements. In the cannabis industry, the absence of uniform standards and reporting has complicated regulators' ability to establish resource consumption benchmarks. This is the motivation behind resource tracking and reporting requirements in Part 113.26(a) of the [medical cannabis regulations](#) and Part 123.4(g)(1) and 123.4(g)(2) of the [adult-use cannabis regulations](#).

## RESOURCE BENCHMARKING REQUIREMENTS

OCM licensees are mandated to engage in resource tracking and OCM has selected PowerScore to meet this mandate. PowerScore reporting as required by OCM will not come at a cost to the licensee. However, licensees have the option to participate in a voluntary benchmarking, analytics and education program supported by RII's technical team and subject matter experts for an annual fee. The date on which licensees must begin using PowerScore will be established in future guidance.

Licensees will enter information from their monthly power and water service providers, including information about their use of on-site renewable energy sources and their utility in the PowerScore platform. Licensees will also enter information about harvest cycles, yields and waste generation including but not limited to:

- *Production information:* indoor, greenhouse or outdoor production, square footage and number of lights used;
- *Utility:* utility service provider used, whether and from what source operator uses on- or off-site renewables, electricity consumed, monthly peak demand, alternate sources of energy and fossil fuels consumed;
- *Waste generation:* plant waste disposed of per year, waste disposal methods for growing media and other materials and supplies; and
- *Harvest information:* length of cycle per growth phase (i.e. mother, seedling/clone, vegetative, flowering), frequency of harvest, total annual harvest.

## A RESOURCE-EFFICIENT CANNABIS PRODUCTION BLUEPRINT

**For the Future of New York:** By mandating resource tracking for cultivation licensees, New York State's (NYS) [Office of Cannabis Management \(OCM\) positions New York \(the state\) as a global leader in resource-efficient cannabis production](#) while ensuring the state industry stays compliant with the [Climate Leadership and Community Protection Act \(CLCPA\)](#), which sets statewide targets for greenhouse gas emissions reductions. Once benchmarks have been established, OCM can effectively support industry licensees to reach a goal of net zero carbon generation, waste minimization and water protection. The data collected through PowerScore will be used to identify program success and challenges for OCM cultivators, ultimately serving as guidance for future policy, education, and funding decisions.

## A RESOURCE-EFFICIENT CANNABIS PRODUCTION BLUEPRINT (CONT.)

**For Cultivators:** Understanding what level of resource inputs cultivators are using will help them better understand the relationship between their operating costs and their yield. The first year's data will serve each cultivator as their benchmark and in following years, they will be able to use benchmarked data as their efficiency target. By improving resource consumption per yield year-over-year, cultivators may have the ability to reduce input costs and operating costs, allowing them to maintain greater profit. Operators that are extremely resource-efficient may also be able to use this information as a tool to earn greater price premiums from consumers who value environmentally friendly production.

## POWERSCORE REPORTING TO LICENSEES AND OCM

After the licensee enters consumption and production data, OCM will receive a notice that reporting has been completed. Licensees will receive a Performance Snapshot that includes [a percentile ranking](#) relative to other anonymized operations on production, facility, lighting and HVAC efficiency. The Performance Snapshot will include but is not limited to the following. Access the [PowerScore Glossary here](#) to learn more.

- *Energy usage:* by energy consumed per square foot (kBtu/sqft) and energy consumed per pound of cannabis produced (kBtu/lb);
- *Water usage:* by gallons consumed per square foot (gal/sqft) and gallons consumed per pound of cannabis produced (gal/lb);
- *Emissions:* by emissions associated with your energy source calculated as carbon dioxide equivalent per square foot (CO<sub>2</sub>e/sqft), and carbon dioxide equivalent per pound of cannabis produced (CO<sub>2</sub>e/lb); and
- *Waste generation:* reported in pounds per square foot (lbs/sqft) and pounds of waste per pound of cannabis produced (lb of waste/lb).

**What is aggregated data?** Aggregated data is data that has been combined such that no longer represents the individual level. It can also be thought of as a summary of data points. As such, RII may aggregate the licensee's raw data with that of other participant's or other data sources obtained by RII, and RII may use the results of the data aggregation to develop custom reports, forecasts, or other deliverables for any third party, all of which shall involve aggregated data.

**Data Ownership and Protection Note:** Information submitted to RII through PowerScore by licensees is anonymized to protect confidential operational metrics and although RII does conduct aggregate data analysis and reporting, they will not analyze metrics from one geography unless there are three or more licensees in the area. Raw data submitted by licensees is owned by the licensee and RII will not sell individual farm-level data.

## WHY RII'S POWERSCORE VERSUS OTHER VENDORS?

Currently, RII is the sole vendor providing cannabis-specific resource tracking. However, the U.S. Environmental Protection Agency (EPA) manages a similar product, specific to neither cannabis nor CEA, [ENERGY STAR Portfolio Manager](#). The purpose of choosing PowerScore over Portfolio Manager is PowerScore's cannabis-specific design and RII's benchmarked data from multiple states. Additionally, RII has contracts and relationships with other NYS agencies, the United States Department of Energy, product manufacturers and utilities, presenting the opportunity for enhanced communication between OCM and such entities. California have also mandated PowerScore for cannabis cultivators, and RII works with cultivators in California, Colorado, Illinois, Massachusetts and Mendocino County, Michigan, Montana and Vermont.

### MORE RESOURCES

Scan QR code to review the [Energy and Environmental Sustainability](#) webpage for more information about the Office's commitment to minimizing the environmental impacts of the cannabis industry.

