



RESOURCE  
INNOVATION  
INSTITUTE

**New York**

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# PREPARE FOR BENCHMARKING

# What to Prepare Before you Benchmark

## At least one year of your facility Performance and Production

- Facility General Information
- Lighting system details
- HVAC system details
- Annual resource use
  - Water consumption
  - Energy consumption
    - Electric & Fuels
  - Energy Production from Renewable Sources *(if applicable)*
- Annual Production:
  - Waste disposal information
  - Annual production of cannabis

See all survey questions in this PDF to help in gathering data



 Download PDF of All Questions

[Access Survey Here](#)

# Info to Bring: Facility Information

## General Information

- ❑ What is the type of each growing space?  
Indoor, Greenhouse/Mixed Light, Hoophouse, Combination of Outdoor and Greenhouse/Mixed Light, or Outdoor
- ❑ What is your production management class/tier?
- ❑ License Number
- ❑ Business name.
- ❑ Postal code.
- ❑ E-mail address.
- ❑ Growing year.
- ❑ Your electric utility
- ❑ What growing and processing activities do you do at your facility?
- ❑ For Each Growing Space: What type of environment is Space #1?
- ❑ How many types of light fixtures are used for growing in Space #1? If lights have different wattages, then they are different types.
- ❑ What is the average square footage under production in Space #1? (*see page 6 for canopy area calculation*)
- ❑ Which stages of growth occur in Space #1?

# Info to Bring: Lighting & HVAC

## Lighting

- Make & model
- Lighting Fixture Wattage
- Lighting Fixture Photosynthetic Photon Efficacy (PPE)
- Number of fixtures
- Hours per day lights are on
- Days per year lights are on

## HVAC

- Understand your HVAC system to be able to select it from a list of typical system types
  - You can find the typical system types on [Pages 3-5 here](#)

Type of lighting fixture

LED

Make

Model

Click a search result to select the light:

Acro Optic: CRAVE LED Reef Lighting System

Active Grow: AG/SG300/227V/DIM/AS/MB

Advanced LED Lights: ARC Series 300

Advanced LED Lights: ARC Series 400

Advanced LED Lights: ARC Series 600

Advanced LED Lights: ARC Series 900

Advanced LED Lights: DS XTE 100

*With your lighting make and model we can find details in our database to calculate your Lighting KPI*

# Info to Bring: Annual Resource Use

## Water

- Water consumption

## Energy

- Total energy consumption

This can include:

- Electricity
- Natural gas
- Delivered fuels
- And/Or Backup generation
- Renewable energy generation *(if applicable)*

	Electricity Usage (kWh)	Peak Electric Demand <span style="border: 1px solid black; padding: 2px;">kW</span>
Jul '2020		
Aug '2020		
Sep '2020		
Oct '2020		
Nov '2020		
Dec '2020		
Jan '2021		
Feb '2021		
Mar '2021		
Apr '2021		
May '2021		
Jun '2021		

**Find this information on your utility bills or building automation system reports**

# Info to Bring: Annual Canopy Area & Production

## Production

- ☐ Average canopy under production during the 12 month period

(Average means - if your 1,000 sq. ft. canopy area grows **only crop 1** for ½ of the year and **only crop 2** for the other ½ of the year. 500 sq. ft. is assigned to *crop 1* and 500 sq ft is assigned to *crop 2*)

- ☐ Do not include aisles, post production, offices or other non production areas
- ☐ Total annual production of cannabis by weight

## Waste

- ☐ How are you disposing of green waste?
- ☐ Total waste produced

For each crop, what is the **total production** throughout the same 12-month reporting period?  
\*required

	Measure Method	Units	Annual Total
Cannabis	select... ▼	-	

What is the average canopy under production (in square feet) for each crop in (Space #1)?

A reasonable estimate of a crop's canopy area is defined as the tray and table area used for production, not the total area available for planting. Exclude all aisles, walkways, and non-cultivation areas.

	Average Canopy Area *required
Cannabis	

# After Completing the Survey







## View your Records

- Review your KPIs in your Performance Snapshot
- See how you rank against other facilities like yours
- Enter multiple records to see your year-over-year performance
- Learn more about the calculations in the [PowerScore Glossary](#)

## Questions

- Email [powerscore@resourceinnovation.org](mailto:powerscore@resourceinnovation.org) if you have any questions

**Whole Facility**
Select KPI Units:  
Imperial  Metric

Energy			90 <sup>th</sup> percentile
Energy Efficiency ●	74.1 kBtu / sq ft	↑ 79% better	 100 <sup>th</sup> percentile
Electric Efficiency ●	34.1 kBtu / sq ft	↑ 84% better	 94 <sup>th</sup> percentile
Non-Electric Efficiency ●	40 kBtu / sq ft	↑ 72% better	 100 <sup>th</sup> percentile
Emissions Efficiency ●	8.09 lbs CO <sub>2</sub> e / sq ft	↑ 59% better	 100 <sup>th</sup> percentile
HVAC Efficiency ●	392 kBtu / sq ft		 7 <sup>th</sup> percentile
Water			100 <sup>th</sup> percentile
Water Efficiency ●	4.4 gal / sq ft	↑ 77% better	 100 <sup>th</sup> percentile

**Year-Over-Year**

↑

74.1% better


Select a second PowerScore for comparison snapshot or [add another](#):

#48357561-20

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**Overall: Leader**

Your operation's overall performance is compared to small greenhouse/hybrid facilities (less than 5,000 sf) in PowerScore's Ranked Data Set:



80<sup>th</sup>

percentile

Come back to check your PowerScore regularly to see how your rank changes as more facilities benchmark their performance!

Create A Copy Of This PowerScore