

County Of Santa Barbara

Mona Miyasato
County Executive Officer



105 East Anapamu Street, Room 406
Santa Barbara, California 93101
805-568-3400 • Fax 805-568-3414
www.countyofsb.org

Executive Office

Cannabis Energy Conservation Plan Electricity Use Calculation Form

Applicants must submit this form along with an application for a Business License for commercial cannabis activities. The information will be used to evaluate the project's impact on energy use and to determine compliance with Chapter 50-10 of the County Code, Licensing of Commercial Cannabis Operations.

An applicant for a cannabis business license for indoor cultivation, mixed-light cultivation, nursery operation, manufacturing (volatile or non-volatile) and/or distribution shall prepare and submit to the County Executive Office an Energy Conservation Plan. The Energy Conservation Plan is specific to electricity use only. Sections 1 through 4 below outline the steps required to determine the amount of electricity use to be reduced or offset from the proposed cannabis activities. Section 5 identifies possible options to offset the electricity use calculated in Sections 1 through 4.

TYPE OF OPERATOR: All cannabis and non-cannabis agriculture-related activities that have occurred on the property (e.g., cultivating, manufacturing, distributing, etc.) should be considered.

- Existing Operator with electricity use in 2007 – Go to Section 1
- Existing Operator with electricity use after (but not during) 2007 – Go to Section 2
- New Operator – Go to Section 3

SECTION 1 - EXISTING OPERATOR WITH ELECTRICITY USE IN 2007

A. Total electricity use in 2007: _____ kWh

Obtain this information from bill statements for January to December 2007, or by contacting the appropriate electricity provider (SCE or PG&E). Attach supporting documents.

B. Calculate a 15% reduction in electricity use from that of 2007: _____ kWh

Method: Multiply the value from A., above by 0.15.

Example: 10,128 kWh of electricity use in 2007 x 0.15 = 1,519.2 kWh

Demonstrate that the proposed cannabis operation will achieve a reduction in electricity use equal to or greater than the value indicated in B., above. Refer to Section 5 for options to satisfy this requirement. Attach supporting documents such as utility provider statements, photo-documentation, citations for estimation data and average estimation values.

Terri Maus-Nisich
Assistant County Executive Officer
tmaus@countyofsb.org

Matthew P. Pontes
Assistant County Executive Officer
mpontes@countyofsb.org

Jeff Frapwell
Assistant County Executive Officer
jfrapwell@countyofsb.org

Dennis Bozanich
Deputy County Executive Officer
dbozanich@countyofsb.org

SECTION 2 - EXISTING OPERATOR WITH ELECTRICITY USE AFTER 2007

C. Most recent historic three-year average annual electricity use: _____ kWh/yr

Obtain this information from bill statements for the selected years or by contacting SCE or PG&E. Attach supporting documents. Use Section 4 below if you are estimating the historic annual electricity use for the past three years.

D. Calculate a 15% reduction in electricity use from the historic three-year average annual electricity use: _____ kWh

Method: Multiply the value from D., above by 0.15.

Example: 10,128 kWh of average annual electricity use \times 0.15 = 1,519.2 kWh

E. Demonstrate that the proposed cannabis activities will achieve a reduction in electricity use equal to or greater than the value indicated in E., above.

Refer to Section 5 for options to satisfy this requirement. Attach supporting documents such as utility provider statements, photo-documentation, citations of estimation data and average estimation values.

SECTION 3 - NEW OPERATOR

F. All electricity use associated with the proposed cannabis activities must be offset. Refer to Section 4 for guidance on how to calculate electricity use. Refer to Section 5 for options to satisfy the requirement to offset 100% of electricity use.

SECTION 4 – ESTIMATING ELECTRICITY USE

G. Estimated annual quantity of kWh reduction required: _____ kWh (from Section 1, 2 or 3)

Use the formulas below to estimate future electricity use, or provide an alternative methodology with supporting information for that alternative methodology.

For each one square foot of cultivation area, the estimates¹ below may be used:

Indoor Cultivation (200 kWh/sf/year) _____ sf \times 200 = _____ kWh/year

Mixed-Light Cultivation (110 kWh/sf/year) _____ sf \times 110 = _____ kWh/year

Outdoor Cultivation (20 kWh/sf/year) _____ sf \times 20 = _____ kWh/year

Example: If the proposed operation includes 40,000 sf of outdoor cultivation, the multiplication factor is 20, resulting in an estimate of 800,000 kWh per year.

For each one square foot of operations space, the estimates² below may be used:

Manufacturing and Testing (17 kWh/sf/year) _____ sf \times 17 = _____ kWh/year

Storage for Distribution (6 kWh/sf/year) _____ sf \times 6 = _____ kWh/year

Example: If the proposed operation includes 2,000 sf of manufacturing space and 1,500 sf of storage space, the equation would be: $(2,000 \times 17) + (1,500 \times 6)$, resulting in an estimate of 43,000 kWh/year.

SECTION 5 – OPTIONS TO IMPLEMENT ENERGY CONSERVATION PLAN

Provide evidence of the implementation items below that would quantitatively address the electricity reduction requirement (e.g., paid invoices, utility provider statements, photo-documentation). Include the total expected kWh to be offset for each aspect of the proposed activities. The total must equal or exceed

the values listed in Sections 1 through 4, above. Implementation items may include, but are not limited to:

Compare to Historic Information

- Participate in annual energy audit which may include measurement and recordation of electricity use;
- Compare electricity use to industry benchmarks.

Use Energy Conservation Options (reduce energy use/increase energy efficiency)

- Develop a phase-out plan for the replacement of aging equipment;
- Participate in the Smart Build Santa Barbara (SB2) Program, including plan review by the County Green Building Committee;
- Adopt all or some elements of CalGreen Tier 1 and 2 voluntary energy-saving measures to increase energy efficiency in new buildings, remodels and additions – quantify these changes;
- Implement an automated lighting system;
- Upgrade heating/cooling/dehumidification systems;
- Implement light-emitting diode (LED) over high-intensity discharge (HID) or high-pressure sodium (HPS) lighting;
- Use Appendix F of the Santa Barbara County Energy and Climate Action Plan (if applicable).

Use Renewable Energy Sources

- Install solar panels;
- Provide evidence of enrollment in a renewable energy option with SCE, PG&E or equivalent certified energy program (e.g., Green-e Energy Certification Program) that would supply the required electricity offset. Many programs typically offer options to reduce 50 to 100 percent of use.

¹ Oregon Department of Energy. 2018. Indoor Cannabis Cultivator Energy Use Estimator (from <https://energy.odoe.state.or.us/cannabis.html>) Retrieved 5/30/18.

² U.S. Energy Information Administration (EIA). 2012. Commercial Buildings Energy Consumption Survey (CBECS) – 2012 CBECS Survey Data Consumption & Expenditures – Electricity (from <https://www.eia.gov/consumption/commercial/data/2012/index.php?view=consumption>) Retrieved 6/14/18.