

SEM program lights the way to **big savings** for cannabis growers

Terrapin Care Station is a vertically integrated cannabis company based in Colorado. With multiple grow facilities, it can be difficult to keep an eye on all facets of each facility. Enrolling in a Strategic Energy Management program made sense in helping Terrapin centrally manage its energy-saving efforts.

Strategic Energy Management (SEM) programs typically concentrate on both capital projects and no-cost/low-cost projects. Capital projects involve replacing equipment with more efficient equipment while no-cost/low-cost projects involve adjustments to existing equipment to realize energy savings. Projects within indoor agriculture facilities are often capital in nature, although there are no-cost/low-cost projects available. SEM programs often offer incentives for various types of projects.

Examples of projects that Terrapin implemented include:

- Replacing standard high intensity discharge (HID) lighting with LED grow fixtures
- Adjusting HVAC setpoints to better manage indoor air while keeping plants happy
- Fine-tuning fixture output to supply the optimal light to the plants

Terrapin Care Station utilizes Energy Sensei®, an energy management platform with the capability of tracking projects. All interested parties are able to access the Opportunity Register and make updates to projects, allowing everyone to know the status of each energy-saving opportunity.

TERRAPIN
CARE STATION



PROGRAM SAVINGS

Strategic Energy Management Program

Indoor Ag Cohort



26%
Energy Savings
in the first 18 months



\$278,450
in Annual Avoided
Energy Cost



LIGHTING THE WAY

Most cannabis grow facilities were built utilizing the original industry-standard light fixtures — HIDs. However, in the past ten years many of the major lighting manufacturers have moved into the grow lighting business and with that comes the resources to engineer the fixtures for lower energy and optimal light. The energy use of LEDs is typically 60–70% of that of HIDs so significant energy savings are available to sites that implement lighting retrofits.

LOOKING FORWARD

SEM focuses not only on implementing projects, but on company culture. This ensures that energy topics are given the priority they deserve. Upon graduating from the SEM program, Terrapin’s team will know how to appraise energy impacts of proposed projects as well as maintain savings from projects already completed. This knowledge sets them up for running an efficient operation and leveraging help from the utility when needed.

An exciting upcoming project is to implement a dim-up/dim-down profile that mimics natural sunrise/sunset light changes inside of the grow facility. Cascade Energy looks forward to discovering additional energy savings at Terrapin’s facilities.



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The cannabis industry has an opportunity to walk a different path when it comes to addressing climate change and our carbon footprint. The SEM program in Colorado, along with the consultation of Cascade Energy, has allowed for forward-thinking sustainability initiatives in the rapidly-evolving new industry of cannabis. Being able to save money as a company, while also curbing our energy footprint for the good of the climate, has been a win-win for us. It’s been incredibly helpful to work with the program’s coaches to realize cost savings while helping our new industry become more efficient. It would be incredible to see this program recreated in every legal cannabis market across the country.

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PETER MARCUS

*VP of Communications,
Terrapin*

To learn more about the benefits of SEM and if you are eligible for a program in your state, reach out to engage@cascadeenergy.com.

