



DENVER
THE MILE HIGH CITY



Greener Green: Denver's Approach to Collaboration with the Legal Cannabis Industry

GBENN Summit Presentation

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- About Certifiably Green Denver
- Overview of legal cannabis in Denver
- Environmental concerns and opportunities in the industry
- Building a network
- Program future

- Established in 2009
- Administered by the City and County of Denver's Department of Environmental Health
- Over 1700 businesses enrolled
- Over 200 certified businesses and events
- Staff: Program Manager, 2 Advisors, Community Engagement Administrator (part-time)



- Goals:
 - Foster a network of green businesses in Denver
 - Conserve energy and water; reduce environmental impacts of Denver businesses
 - Support the local small business community
- Metrics
 - Nearly 5 million gallons of water per year
 - 28 million kWh saved
 - \$2.7 million reduction in utility bills

Types of Businesses Certified

Certiably Green Denver is committed to work with all types and sizes of business throughout Denver.

Among our participants are certified businesses in the following sectors:

- Restaurants
- Art Galleries
- Fitness Centers
- Salons
- Manufacturing
- Non-profits
- Medical & Dental Offices
- Corporate Offices
- Professional Services
- Special Events
- Lodging
- Printers
- Retailers
- Auto Repair
- Breweries



- Medical Marijuana legalized in 2000
- Retail Marijuana approved by voters in 2012 – sales began on January 1, 2014
- Four license types: retail store, **cultivation facility, marijuana infused product manufacturer (MIP), testing facility**
- In 2016, a total of 1049 licenses issued for 453 unique locations
- Nearly all legally grown cannabis in Denver is produced in warehouses

- Energy – significant electric and natural gas use from lighting, HVAC, CO2 production, water purification equipment
- Water use and wastewater quality (nutrients and pesticides)
- Solid Waste – at the facility and after products leave the store
- Worker health and safety – pesticides, fungus and mold exposure, butane extraction, low oxygen working environment





Barriers to Adoption of Sustainable Practices

1. Best practices are unknown, not proven or in development
2. Historic culture of secrecy (now diminishing)
3. Distrust of new equipment and technology due to faulty products marketed in recent years
4. Federal funding barriers to university research
5. Rapid technology development – what is cutting edge today will be out of date in 5 years
6. Variation in growing techniques and styles means one technology does not suit all growers

- Engagement began when medical cultivation facilities began to move from small home-based operations to larger facilities – primary area of discussion/concern was odors.
- Developed a relationship with a local entrepreneur who was passionate about sustainability and owns several cannabis businesses around 2012 – began hosting regular, informal meetings in 2014
- Formalized Cannabis Sustainability Work Group via open applications in December 2015.

Utilize an existing non-regulatory program that has good relationships with industry to provide education.

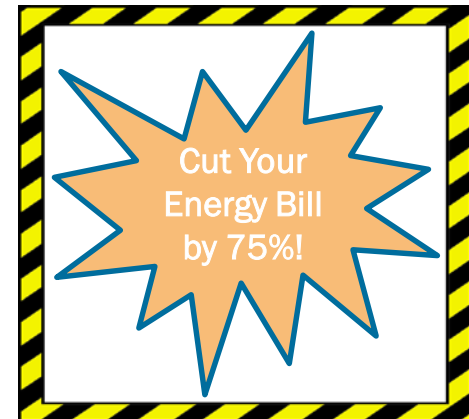
- Engage stakeholders;
- Determine priorities and associated best practices;
- Develop program to engage larger community and provide useful education;
- Utilize rebates as the carrot if possible; and
- Measure results – kilowatt hours saved, gallons of water saved, waste diverted from landfill, number of odor complaints, worker’s comp claims.

Tips for Developing a Network

- Creating trust between growers and government is essential.
- Start with someone you know and expand from there.
- Host regular, open meetings
- Ask for a tour! Growers with good practices are usually willing show off their new technology – normally the only government interest is from regulators.

Utilize Industry Expertise

- Growers know what works and what doesn't.
- Production facilities are living laboratories for new technologies.
- Getting growers to share what they know with one another is one of the greatest challenges but also a huge opportunity.
- Companies that make related technology (lighting, HVAC systems, odor control) are a great source of information and expertise, but be wary of exaggerated performance claims.



Collaborate with Partner Agencies and Organizations

Tap into the expertise and manpower of:

- Utilities
- Neighboring municipalities (opportunities to streamline programs)
- Related agencies
- Universities and nonprofits



- Developing a free Best Management Practices Manual for indoor cultivation – to be released in early 2017
- Survey of cannabis businesses on environmental practices
- First Cannabis Sustainability Symposium – a full day educational event, will be held on October 26th, 2016
- Plan to host additional educational events in 2017

- Cannabis retail stores (aka dispensaries) can be certified under existing retail standards.



CERTIFIABLY GREEN DENVER

Certificate of Environmental Excellence
is hereby granted to

L'Eagle Services

for outstanding achievement in pollution prevention
and environmental sustainability in retail operations

Bestowed on this 25th day of September, 2016

Mayor Michael B. Hancock



Recognition – Finding a Fit

- Some business owners have expressed interest in a certification for their cultivation facility - Certifiably Green Denver will develop if the industry requests
- Certification criteria would be based on BMPs and input from industry stakeholders
- There are other third party certifications options (Clean Green, Pesticide-Free, Cannabis Conservancy) – may not need a local certification

- We still have a lot to learn!
- Much more data and research is needed.
- Best practices will evolve and we need to keep up.

