# Energy Efficiency Guide For Residential Indoor Growing



## Tips for Efficiency

#### 1. Grow Outside

Growing outside for part of the year is a great way to reduce your energy usage. When weather permits (usually between Spring and Fall frosts) bring your plants, vegetables, or flowers outside to give your indoor growing equipment a break and receive benefits from natural sunlight.

#### 2. Grow Off-Peak

Energy consumption is at its highest usage during the work day hours. Plants grown under artificial light are just as happy to receive light during off peak times. You can help keep demand and peak charges down by using your lights during the overnight hours, such as from 8pm - 8am.

#### 3. Use Timers or Controls

Be sure to set up your lights, HVAC, and other growing equipment to on timers, dimmers, or controls where possible. This will allow you more flexibility in your growing hours, less manual switching, and of course, energy savings when your equipment is automatically turned off.

#### 4. LEDs Use Less Energy

- Uses ~1/2 the wattage of a typical High Pressure Sodium (HPS) light
- Runs cooler than HPS and other technologies this means less need for fan or cooling power
- Directional by nature can have good canopy penetration
- Can provide adequate PPFD for plants
- Can be dimmed or color-tuned depending on the product
- Last longer than other technologies
- Don't mind being cycled on and off
- Efficiency Vermont and Burlington Electric offer rebates for LEDs qualified on the DesignLights Consortium<sup>®</sup> Horticultural Qualified Product List.



#### Energy Savings Comparison Non-Efficient Lighting vs. LED

#### Learn about our rebates!

Efficiency Vermont and Burlington Electric Department are exploring ways to offer rebates for LEDs listed on the DesignLights Consortium Horticultural Qualified Product List. As new products come to market, we will be adding new rebates. Visit www.efficiencyvermont.com/rebates frequently, or call us to determine if your product qualifies.

2 | EFFICIENT HOME GROWING GUIDE

Annual Costs

## 1. Safety Testing

Be sure to check manufacturer specification sheets for proof of safety testing by certified labs like UL, CSA, Intertek, and TUV. This will verify that the product has been tested to current safety standards and is ok to plug into your home. It's a good idea to plug your light into a surge protector instead of directly into the wall so that if there is a surge, your equipment is protected.

#### 2. Right-Size Your Ventilation, Dehumidification, or Cooling

If you're using products that put off large amounts of heat, make sure you're venting that hot air appropriately – you can vent it outside or even into your home to recover some of that heat loss. If you're using an A/C unit in your grow space, you may also reduce your cooling load by switching to LED. LEDs produce less heat than other common grow technology.

#### 3. Consider using a dehumidifier

You may need to dehumidify your space to mitigate mold. Be sure to check out rebates for ENERGY STAR rated dehumidifiers at www. efficiencyvermont.com/rebates.

# Tips for Purchasing

#### 1. Manufacturer Matters

Make sure to purchase from a reputable manufacturer – you'll want to make sure that company has traceable website, a customer support team, and independently-verified technical documents that describe the light's capabilities like PPFD and spectrum. If you need help understanding what these metrics mean. call Efficiency Vermont for help.



#### 2. Warranty

Purchasing a product with a warranty is very important. If built or designed incorrectly, products can have early failures, issues venting heat appropriately, or they may not work for the type of plant you're growing. Be sure to check the store or online retailer's return policy and compare that with the product's warranty. Return or replace the product if it's not operating appropriately.

### 3. Purchase in Small Quantities and Test

If you're planning on buying more than one light, maybe start with one and see how it works for your plants. That way, you can compare it side-by-side with your current equipment to determine if the distribution, spectrum, intensity, color, and yield is appropriate for you.

Have additional questions? Contact Us!

Efficiency Vermont: 888-921-5990 Burlington Electric Department: 802-865-7300