Efficient outdoor lighting means that we all can save energy and money and still provide a safe and secure night time environment. Controlled, effective, and economical lighting at home or at a business will offer the same safety, security, and visibility you are use to, while saving you money and reducing wasted energy.

**The Problem with Outdoor Lighting**
When outdoor lighting is not well designed or properly installed, it can cause many problems ranging from extensive costs, inefficient energy use, glare and harm to the night time environment. Four of the major consequences of poor outdoor lighting are:
- Glare
- Light Trespass
- Energy Waste
- Sky Glow

**Example of the effects of poor lighting**
Everywhere except where it should be directed.

**How to Improve Your Own Light Fixtures**
You can improve your light fixtures by refocusing the light away from areas where it is not needed. This can be done by repositioning the light or simply by adding a hood or visor to the light in order to shift where the light is shining.

**Everywhere it shouldn't be directed.**
Efficient Alternatives

Good outdoor lighting means that we can save money, energy and enhance the surrounding environment. Many common fixtures inefficiently waste light and energy by distributing light where it is unnecessary and not useful.

### Examples of Some Common Lighting Fixtures

<table>
<thead>
<tr>
<th>Poor</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Ground-mounted Billboard Floodlight" /></td>
<td><img src="image2" alt="Top-mounted Billboard Floodlights (carefully focused onto billboard)" /></td>
</tr>
<tr>
<td><img src="image3" alt="Foot-candle Lamp (more than 1,000 lumens)" /></td>
<td><img src="image4" alt="Post-cable Lamp (lamp with opaque top)" /></td>
</tr>
</tbody>
</table>

### Helpful Explanations

**Foot-candles (or Candelas)** are a measurement of light at an illuminated object. One foot-candle of light is the amount of light that a candle generates one foot away.

**Candlepower** is a rating of light output at the source, not at the object to be lit.

**A Lumen** is the metric unit equivalent of measurement of light to foot-candles. One Lumen is equal to one foot-candle falling on one square foot of area and measured at the object you want to illuminate.

**Note:** This handout is for informational purposes only.