

## Installing Light-emitting Diode (LED) Bulbs

### Overview:

Replacing incandescent light bulbs with LED bulbs is an easy way to create a positive impact on the environment, while also saving money on energy costs. LED's help reduce CO<sub>2</sub> production and use significantly less energy than incandescent light bulbs, while lasting considerably longer.

### Suggested Age Group(s)

- Adults, teens, children (adult supervision required)

### Suggested Skill Level

- Easy

### Supplies

- LED bulbs
- Gloves/hand towels (in case of contact with hot light bulbs)
- Ladders
- Newspaper (to wrap up discarded light bulbs)
- Trashbags (to dispose of discarded light bulbs- incandescent light bulbs cannot be recycled)

### Project Instructions

#### 1. Identify Partners and Leaders

- Call your friends, family, and coworkers and ask if they would be interested in helping plan and implement such a project. You can also ask schoolteachers and community leaders to lend their support and ideas. These partners may have materials and resources you can use for your project.

#### 2. Set a Location

- Contact your local schools, businesses, city or county representatives, faith-based communities, and nonprofit organizations and ask if they have a need for this type of project at their property. Arrange a meeting with the staff lead (principal, clergy, or other staff) and conduct a site visit as well as review the day-of-project plan.

#### 3. Establish Goals

- Setting goals can help you create a plan for implementing your project. Do you simply want to get some folks together and engage in a meaningful activity for a few hours? Do you want to teach volunteers about the impact of using LED's on CO<sub>2</sub> reduction and energy saving? Do you want to install a certain number of LED's? What do you want your end result to be?

#### 4. Develop Your Plan

- As you continue to establish your project, ask yourself the following questions in order to create a coherent plan:
  1. Where can I get funding for the project supplies and tools needed for the project?
  2. What resources are available to use?
  3. Where can I find volunteers who would be excited about such a project?
  4. How do I get the message out about the project?

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5. Do I want to attach learning to this activity?
6. Do I need to have help from other volunteer leaders?

#### 5. Define a Timeline

- Set a timeline for your project. When will your project begin and end? Will it be recurring? Will there be projects that follow? Where will volunteers meet the day of the project? How will volunteers get to and from the project? How long will the project take?

#### 6. Promote!

Recruit adult and youth volunteers. You may want to print fliers, publish in the school/library newsletter, send emails, and use social media to mobilize your networks. Use whatever medium you can to get the word out and engage people in your effort. You can do this yourself or with the help of partners and leaders you've found in the community.

#### 7. Empower Youth Leaders

- If you are working with youth on this project, keep in mind that the youth voice is a key component in offering a high-quality youth project or program. Young people should have an influence on the project. Allow young people to suggest ideas for the current and future projects.

#### 8. Reflect and Recognize

- After your project, take a few minutes to reflect on the project with the volunteers. Don't forget to thank your volunteers, partners, and supporters. They deserve it!

#### Additional Project Tips

- You may want to create a project that combines other energy reduction activities like installing faucet aerators, building rain catchment systems, installing low-flow shower heads, or programmable thermostats.
- Because of the electricity component, volunteers should be comfortable with switching out light bulbs, and should understand that the light switch should be turned off or power disconnected during the switch out process.
- Volunteers should receive instructions on where restrooms and food/drinks are located in the event they need to access.
- If youth are participating, they should always be accompanied by an adult supervisor with a project that involves a component such as electricity.

#### Reflection

- After your volunteer project, it is important to reflect on the experience and think about the impact of the project on the community as well as what you learned about yourself and others. Here are some suggested activities:
  - Tell your family and friends about something you learned and how you will continue to help others.
  - Blog, draw a picture, write a poem, submit a letter to the editor

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- Write about your experience on your Facebook account or Twitter feed.
- If you are working with a group of volunteers on this project, lead a group discussion with questions such as:
  - Why did you volunteer today?
  - What did you learn about social responsibility and environmental stewardship?
  - What is the one thing that you will remember most about this service activity?
  - How can you continue to make a difference in our community?

#### Additional Resources

- Installing an LED bulb  
<http://www.youtube.com/watch?v=aVwNu72ts8Y>
- Light bulbs for consumers  
[http://www.energystar.gov/index.cfm?fuseaction=find\\_a\\_product.showProductGroup&pgw\\_code=LL](http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=LL)
- Smart for Your Wallet. Smart for Your World.  
[http://www.earthaidenterprises.com/eae\\_calculations.pdf](http://www.earthaidenterprises.com/eae_calculations.pdf)
- VolunteerSpot - A free resource to help schedule and organize volunteer activities  
<http://www.volunteerspot.com/>

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