

## SAVING ENERGY

### A Learning and Service Experience for Teens

*The Youth Department of the synagogue or similar group organizes teams of teens to go to homes of congregants to, demonstrate CFL bulbs and take orders of bulbs for subsequent delivery; and to explain and suggest a follow-up total home energy audit.*

*This community service opportunity will be preceded by group study and discussion about why and how we need to save energy, some Jewish sources that buttress this attitude and an experiment demonstrating the efficiency of CFL bulbs compared to incandescent bulbs.*

### PROGRAM SEQUENCE AND TIMING

(TOTAL TIME – 3-4 ½ HOURS)

- I. Introduce the program's goal and sequence for the day so teens will have appropriate expectations and know their schedule – 5 minutes
- II. Discuss the basic concepts defining energy and why we need to save it (see attached) – 15 minutes
- III. Turn the discussion to, "What do our Jewish sources say about the subject of energy, and saving it?" (See attached) – 20 minutes
- IV. Conduct the experiment comparing efficiency of CFL bulb with incandescent bulb (see attached) – 15 minutes
- V. Review the hand out sheet to be given to home owners, containing Jewish source, a comparison between the two types of bulbs, and on the safety issues regarding handling and disposal of CFL bulbs (see attached)– 15 minutes
- VI. Distribute and review CFL bulb-ordering forms teens will use on their visits – 20 minutes
- VII. Indicate that there are significant other ways to save energy at home and that in closure to their visits they will leave congregants with suggested follow-up actions. Go over the "Home Energy Audit" check list that they will review and hand out when they visit homes of congregants. – 10 minutes
- VIII. Review/summarize with teens what they should say/do at the homes they visit – 15 minutes
- IX. Serve quick and healthy snacks on washable, biodegradable or recyclable utensils
- X. Organize adults/teens teams; walk or drive to first home– 15 minutes

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PROGRAM SEQUENCE AND TIMING  
(CONTINUED)

- XI. At the homes, (45 minutes each home, 10 minutes for travel in between) have the teens:
- a. Explain their project
  - b. Explain, IN SHORT, the need to save energy
  - c. Explain CFL bulbs and demonstrate their efficiency compared to incandescent bulbs. (Optional: demonstrate the different bulb types – “soft white”, “day light”, “cool white”.) For liability’s sake, let the home owner actually insert the bulbs in the sockets!
  - d. Take orders (for specific wattage and light-type) of CFL bulbs for subsequent delivery
  - e. Hand out a sheet with a few Jewish text sources, CFL bulb efficiency and safety information (see attached)
  - f. As closure to the visit, have them review the “Home Energy Audit” check list with the congregant, and leave it for the family’s follow-up. (see attached)

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MATERIALS NEEDED

For the learning/discussion:

- Program instructions and experiment outlines for the leader
- Adequate copies of learning materials for session leader and/or group:  
1) Energy 2) Jewish sources 3) "Home Energy Audit" check list  
(Plan on people sharing sheets)
- Snacks and their utensils

For the experiment:

- One incandescent bulb and one CFL bulb that produce equivalent lumens, e.g., a 60 watt incandescent bulb and a 13 watt CFL, or a 100 watt incandescent and a 26 watt CFL will generally produce the equivalent light levels (lumens). Choose an ENERGY STAR qualified CFL. (Optional: have different kinds of CFL bulbs – "soft white", "day light" and "cool white")
- Two table lamps that can support the wattage of the bulbs
- Two convenient sockets, or extension cords if necessary
- A table or platform to place the two lamps side-by-side

For the visits to homeowners:

- List of teen teams/parents names; the names, addresses, phone numbers of homes to which they are going
- List of drivers, noting cell phones, and which teens they are driving
- Adequate copies of material to be distributed by teens to homeowners:
  - o Handout sheet containing short Jewish source regarding saving energy and information about efficiency and safe handling of CFL bulbs
  - o "Home Energy Audit" check list
- For the demonstration at each home: a 100 watt incandescent bulb, and equivalent CFL bulb (optional: one each of "soft white", "day light" and "cool white")
- Order form for ordering CFL bulbs for subsequent delivery

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SEQUENCE OF THE PLANNING PROCESS

- Youth Dept sets a date (Sunday) for the program; arranges for program staffing, preparation/education on topic.
- Synagogue creates and distributes sign-up materials for congregants/homeowners who would like to have teens visit their homes. (Name address and phone number).
- Youth Dept. signs up teens, as individuals or teams or two or three, who will make the visits.
- Recruit a program leader familiar with energy concepts and able to handle relevant Jewish sources (provided), charismatic, able to teach and interact positively and efficiently with teens.
- Assure time of office support staff or volunteers for the coordinating, purchasing, and follow-up aspects of the program.
- Have someone designated as the central contact at the synagogue for problems in communication/coordination on day of the program.
- Youth Dept./synagogue signs up adults to accompany/drive teens.
- Buy incandescent and CFL bulbs to be used for demonstrations.
- Prepare the learning materials and items to be distributed to home owners.
- Prepare the order forms for CFL bulbs, specifying wattage and type of light, and payment amount and method.