

Compact Fluorescent Lamp Recycling Project

Meeting One – Summary

The first meeting of the CFL Recycling Project was held October 29, 2002. The aim of the meeting was to review the CFL Recycling Project by sharing the results of the Phase I Final Draft Report, and to begin discussion on the scope of a pilot project and regional program and determine the optimum form for the pilot project.

Basic background information was provided on the following: CFLs and mercury, the current situation with regards to collection and recycling, recycling options, case studies, sales and projected failure data, and potential program and payment models. The Charter and Project Principles were also presented to provide a common platform for participants in moving forward. Brief summaries by category from the meeting discussions follow below.

Current Situation

Recyclers were seeing very few CFLs and the ones they were seeing most often were from contractors and college facilities. Costs of CFL recycling are volume dependant. It was thought that concentrating the collection of CFLs would drive the cost of recycling down. Oregon's Household Hazardous Waste (HHW) collection is not truly statewide. Washington has a more extensive collection network for its rural areas.

Recycling Program Options

Some participants felt it would be better to try or combine several different types of pilot projects to see which worked the best. Some of the main issues discussed by the Group for the options are as follows:

- *Curbside*: There are concerns about handling, breakage and cost. A specific concern was that curbside recycling is tending toward commingling, and collecting a specific product that requires special packaging runs counter to this trend. It was also noted that increasing garbage rates to pay for collection would be difficult since the public reacts strongly against even small rate increases. Waste Management trucks would likely need to be modified for the collection of CFLs, which would cause an additional problem. Training would also make up a large part of this option since it entails frequent handling and breakage. No one spoke positively about this option and it appeared to be effectively dropped for discussion purposes.
- *Mail-In*: Several participants expressed support for this option initially, particularly if CFLs could be shipped in the containers in which they are sold. The direct mailing may decrease collection costs. In some distribution programs bulbs were initially distributed in mailers. Concerns were raised about this system as well. The environmental impact of mailing each bulb individually may decrease the net environmental gain of using a CFL. Consumers could become alarmed and the end user cost could increase. CFL recycling could be combined with existing structures for recycling tubes – rather than singling CFLs out. The level of engineering in a container and potential waste of packaging was also noted. One concern was that people would need to keep a pre-paid mailer for the life of the CFL to mail it back when it burns out. It may not be likely that people will store the mailer that long and remember to send it in. Others noted that postage and recycling costs could change in between when the bulb is purchased and when it burns out. There appeared to be too many issues with Mail-In to consider it as the mainstream method, but it might be considered for special cases.

- Increased Utilization of Household Hazardous Waste: HHW collection is very expensive for most counties. It would be good to bring in outside resources to help HHW collection programs if they are utilized for CFL collection. The Group felt it is worthwhile to offer other options because HHW is not convenient for most people. Others noted that it is not environmentally sound to drive one CFL to a HHW facility for the recycling. A few participants commented that most population areas have HHW and the more rural areas could hold recycling events. Others noted that this option would be good as a component of a recycling system, but is not necessarily the whole solution. It was thought that there would be a marginal cost for advertising and education that would pay off with the collection of more bulbs.
- Retail Store: Space in a retail store is often \$100/square foot and using that space is a real cost to the business. Independent stores may be more open to the idea of collecting CFLs based on discussions with several local stores, and the fact that hundreds of stores in the Minnesota program feel there is a benefit from the increased foot traffic recycling brings. However, there is a landfill ban in place in Minnesota helping to drive this return of fluorescents. Some of the concerns were the cost and pickup schedule. Larger stores often require corporate approval to participate programs. This trend was echoed by DEQ participants in their experience that smaller stores were easier to work with when running a retail paint collection program. Smaller storeowners were better able to train their employees and track the benefits of increased foot traffic. It was noted that the Oregon bottle bill began with small stores like Plaid Pantry taking back bottles, and that large stores eventually drove out smaller stores once the program gained momentum. However, CFL take-back would not be on the same scale as the bottle bill situation.

Home Depot and Costco accounted for 40% of all CFL sales in the Northwest. Others saw that this might impose the burden of collection onto smaller stores. An Ace Hardware owner from Minnesota noted that he benefited by receiving CFLs that had been purchased elsewhere. One recycler participating at the meeting had offered earlier to take bulbs for free from a large retailer. The retailer declined because of liability concerns. CFLs are a small part of large stores' market. It was noted that with the other return programs, wholesalers were unwilling to sign up without corporate approval, whereas smaller independent storeowners see it as opportunity to increase foot traffic and provide a benefit to the community. Several suggested that small retailers could perhaps work for a pilot project, but that large retailer would later need to pick it up.

The Group did not speak positively of the curbside recycling option and it seems to be dropped from discussion. There seem to be a number of issues with mail-in option that make it undesirable for a mainstream method of collection – namely packaging, potential breakage, and change in recycling cost over time – though it could be useful in special cases, as could recycling "events". Increased utilization of household hazardous waste could be a part of the CFL recycling solution but it is unlikely to serve as a mainstream method because of inconvenience to people wishing to recycle burned out lamps. The retail option seemed to be the most likely option for a CFL recycling pilot project.

Funding /Payment Options

Originally it was envisioned that a pilot project would also test a method of payment. After subsequent meetings and planning, it was decided that designing, setting-up and testing a payment method would not be practical in a pilot with a 12-month long collection period. Regardless, the discussions on some issues concerning payment options are included below:

- *Up front cost:* Many in the Group agreed that the public will ultimately pay for CFL recycling. With an upfront fee (Advanced Recovery Fee) CFLs would be at a comparative disadvantage for price. Since price is the largest drawback of CFLs, a further cost increase would be a further disincentive and cause fewer CFL sales. The idea of an industry association like the Rechargeable Battery Recycling Corporation (RBRC) might work for CFL recycling. Many thought capturing the fee at the front end is advantageous because many CFL users will not want to pay an explicit end-of-life fee. The majority of the Group felt that an Advanced Recovery Fee was the best option.
- *Back end fee:* Some participants noted that a back end fee is an economic disincentive to recycling because it charges explicitly for the disposal. The public would be more inclined to recycle if they paid the cost up front and did not have to pay separately at the end. Take back fees seem expensive. Perhaps environmentally aware customers will pay the fee – otherwise it seems unfair to pay for recycling since using CFLs is energy efficient. Whatever the fee, there was concern about pricing for recycling and it should get close to cost so there are no disincentives.
- *Utility funded:* Some in the Group noted that the electric utilities receive a benefit from the energy efficiency of CFLs and that they might be asked to fund part of the recycling. Others stated that electric utilities pass both costs and benefits to their ratepayers and are not the only party that accrues the benefits of energy efficiency. It was mentioned that a program might be fundable through an energy organization such as The Energy Trust of Oregon.

Next Steps

There was a request for information about the demographics of CFL users. This would help target collection efforts and focus the educational campaign about the program. EcoNorthwest stated that they could break down their CFL distribution data/study by store and provide detailed geographic information. The Group was in agreement with the principles of the pilot project. The scope of a larger recycling program for the region was not discussed in the time allotted. The scope of administration of the pilot project was touched on though no decisions were made concerning who would implement and operate the program. It was thought that administration requirements will be better understood as participants, locations, and the recycling model of the pilot project are confirmed.