

**NATIONAL ELECTRONICS PRODUCT STEWARDSHIP INITIATIVE  
DRAFT MEETING NOTES OF THE FINANCING SUBGROUP**

January 24-25, 2002

Tampa, FL

The NEPSI Financing Subgroup met for several hours on January 24<sup>th</sup> and 25<sup>th</sup> as part of the NEPSI stakeholder meetings in Tampa. This document summarizes the major topics covered during the subgroup's discussions, and highlights any agreements that were reached.

**Attendees**

Clare Lindsay, EPA	Vicky Salazar, EPA Region 10
Ted Smith, SVTC	Frank Marella, Sharp
Gary Davis, CCP-U Tenn	Maureen Hickman, Minnesota OEA
Jennifer Shepherd, Solectron	Sherry Enzler, Minnesota OEA
Patricia Franco, Philips	J. Ray Kirby, Polymer Alliance Zone
Doug Smith, Sony	RV Buddy Graham, PAZ
David Stitzhal, WEPSI/NWPSC	Margaret Walls, RFF
Bill Cass, NEWMOA	John Burkitt, Compaq
Ted Campbell, South Carolina DOC	Heather Bowman, EIA
David Isaacs, Hewlett-Packard	Alan Phipps, PSI
Ed Gillespie, IBM	Sego Jackson, Snohomish County
Tim Mann, IBM	Scott Cassel, PSI
David Thompson, Panasonic	Raoul Clarke, Florida DEP

**FINANCING SUBGROUP - SESSION I: MORNING, JANUARY 24, 2002**

After Raoul Clarke, the subgroup chair, reviewed the subgroup's deliberations to date, he proposed that the group use this session to thoroughly discuss the major issues and primary concerns of each stakeholder group when considering the two major categories of financing models: end-of-life (EOL) fees and front-end fees. Subgroup members decided to proceed by listing a set of pros and cons they felt were associated with each type of system. The group agreed to include in the list all pros and cons that were named, even if some items didn't represent a group consensus.

The following summarizes the results of the discussion regarding EOL fee systems:

<b>EOL Fee System -</b> <i>the costs associated with collection, transportation, and recycling are paid by the end-user at the point of discard.</i>	
<b>PROS</b>	<b>CONS</b>
<ul style="list-style-type: none"> <li>• Fairly covers orphan/historic products</li> <li>• Eliminates free riders</li> <li>• Handling fees is logistically simple</li> <li>• Fee can be an incentive to reuse or extend the life of a product</li> <li>• Encourages development of economically efficient recycling because system is more market driven (fees will decrease faster as recyclers compete)</li> <li>• Infrastructure could be established quickly</li> <li>• Participation is open to many actors (e.g., charities, OEMs, municipalities)</li> <li>• Has direct public education component because fee is visible at the time the service is rendered</li> <li>• System can be flexible so it is convenient to the consumer</li> </ul>	<ul style="list-style-type: none"> <li>• Regressive because fees will probably burden lower-income individuals limited to purchasing used equipment and therefore likely to be the final end-user</li> <li>• Encourages illegal dumping</li> <li>• Fee is a disincentive to return at EOL</li> <li>• Administratively difficult to collect money from disaggregated sources</li> <li>• More enforcement would be required</li> <li>• No incentive for DfE</li> <li>• Low collection rates</li> <li>• System costs will not be as low as in a system where a third-party, rather than groups of municipalities, negotiates transportation and recycling contracts</li> <li>• More vulnerable to scam operators who collect the fees and do not recycle equipment</li> <li>• System does not change the status quo; local governments will still bear the full burden</li> <li>• Need a landfill ban or some other incentive for returning products at EOL (e.g., old for new, voucher to apply to EOL fee)</li> </ul>

At the end of the discussion of EOL fees, the subgroup noted two questions whose answers would help illuminate the discussion:

- Is there any analytical evidence to support the assertion that EOL fees act as a disincentive for returning products?
- What other incentives for return could be employed in an EOL fee system? Would a landfill ban be a sufficient incentive?

To focus the discussion of a front end-fee system, the subgroup decided to address a system that does not involve a licensing fee. The following summarizes the results of the discussion regarding front-end fee systems:

<b>Front-End Fee System -</b> <i>the costs associated with collection, transportation, and recycling are paid by a visible fee at the point of purchasing new products.</i>	
<b>PROS</b>	<b>CONS</b>
<ul style="list-style-type: none"> <li>• Provides an immediate source of funding to set up system infrastructure</li> <li>• Can provide funding for public education</li> <li>• Can cover orphan/historic products</li> <li>• States have existing mechanisms for handling fees</li> <li>• Lack of EOL fee means there is no equivalent disincentive for return</li> <li>• Fee paid at time of purchase has a more positive effect on consumer education</li> <li>• Experience with ARFs in Europe allows the U.S. to take advantage of lessons learned</li> <li>• A variable advance fee could promote competition and economic efficiency (i.e., as in Japan, each OEM or group of OEMs set individual fees)</li> <li>• Doesn't preclude OEMs from recycling their own equipment, which could lead to great advances in DfE and cost efficiencies</li> <li>• All sales can be treated fairly (i.e., Internet, retail, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Need a third party to administer the program</li> <li>• Not fair for consumers today to pay for costs associated with historic/orphan products</li> <li>• Fee added to purchase price may decrease demand for new products</li> <li>• If system is voluntary, would allow free riders; if mandatory, would be difficult to pass legislation</li> <li>• Difficult to enforce ARF on Internet sales</li> <li>• More of a burden is placed on industry</li> </ul>

Acknowledging that the entire set of desired attributes developed by the full Stakeholder Group in San Francisco is important, subgroup members articulated the top priority concerns associated with a front-end fee system:

- Industry
  - (1) Cost effectiveness
  - (2) Coverage of historic/orphan waste
  - (3) Free riders
  - (4) Fairness - today's consumer pays for the cost of recycling computers purchased by yesterday's consumer
  - (5) Shared responsibility - clear roles for all stakeholders
- Government/NGOs
  - (1) High collection rates
  - (2) Government administration is not desirable if system is to be cost effective

- (3) Governments are willing to contribute facilities and resources, but will need financial assistance to supplement the existing infrastructure to accommodate system
- (4) Sound recycling
- (5) Incentives for DfE

In the little time left in this session, subgroup members discussed a hybrid financing system. One suggestion was that an EOL fee could be used initially to cover the costs of orphan and historic products, followed by a front-end fee that would be assessed on new products. Another hybrid model suggested was to supplement a front-end fee system with EOL fees to handle mailback programs for rural areas. A concern voiced for any hybrid system was the perception that consumers would be paying twice—both at the time of purchase and at EOL.

Before adjourning for lunch, the subgroup members crafted a statement to be presented to the plenary session after lunch:

*The financing subgroup will explore hybrid systems in which EOL fee and ARF models are used simultaneously or sequentially to meet desired the attributes of a financing system.*

## **FINANCING SUBGROUP - SESSION II: AFTERNOON, JANUARY 24, 2002**

Returning from a brief plenary session after lunch, subgroup members decided to discuss the front-end fee model in light of the top-priority concerns expressed by industry stakeholders to see if some solutions could be crafted to address key concerns. The discussion focused on each overarching concern individually:

### *Shared Responsibility*

Government stakeholders expressed their willingness to commit resources to filling the following roles:

- Support the need for regulations that require all manufacturers to participate in a front end fee program
- Provide some staff and resources for collection events and mass media public education campaigns
- Provide some staff and resources to address illegal dumping remedial activities
- Provide facilities and other existing infrastructure as available, such as permanent household hazardous waste facilities

Government stakeholders expressed the need for fees to cover a minimum level of service. The large majority of local governments will be unable to provide additional funds for collection and transportation. It was noted that some very small local governments do not have any resources to offer and will have to have special arrangements (i.e., assistance from retailers or from a third-

party organization).

There was a discussion about the minimum level of service. It was agreed that permanent drop off sites for electronics were not necessary. Periodic collection events, possibly 3 to 4 times per year, would be adequate. It was noted that collection rates would be higher if collection events were held with adequate frequency. Municipalities that wanted to offer more than the minimum level of service could do so, but associated additional costs would have to be funded outside the system. Establishing a minimum level of service covered by the fees is needed to control costs.

Industry stakeholders noted that collection and transportation costs would represent the greatest share of the costs of any program. The recycling costs would be a small portion of the total. They felt that industry is better suited to handle recycling because of their technical expertise, but government has more expertise and capacity for handling collection and transportation. A great concern for industry is the price elasticity of demand for their products. Limiting the collection and transportation costs that have to be covered by a front-end fee will reduce the potential negative impact on demand for new products. Government stakeholders pointed out that a universal, visible fee would greatly soften the potential effect of a front-end fee on new product demand.

Industry stakeholders were concerned about the practicality and cost of collecting used products from individual municipalities and suggested the use of regional consolidation facilities. Again, the industry is concerned about cost efficiency. Since industry cannot control collection and transportation activities of municipalities, they don't want to be responsible for those costs. Government stakeholders could accept the idea of regional collection/consolidation facilities if there were enough facilities located within a reasonable distance and if there were some funds available from the fees to assist with collection and transportation costs.

Several stakeholders, both industry and government, thought that having the government administer a front-end fee program would not result in the most cost-effective system.

Industry stakeholders noted that an important role for them was to incorporate DfE principles in their new product designs. Industry is already investing in this and will continue to do so.

### Free Riders

**All stakeholders agreed that to guard against free riders, there would need to be Federal legislation that authorizes a front-end fee system and compels all players to participate, even companies conducting sales over the Internet.** The subgroup also agreed that a visible ARF at the point of sale of new products would be a strong enforcement mechanism for eliminating free riders. Retailers would play a role in enforcement by collecting fees. Some form of auditing would probably need to take place, similar to the controls for enforcing collection of sales taxes. Some stakeholders expressed concern that enforcement of this legislation would be given low priority. The difficulties associated with passing new

legislation were also noted. State government stakeholders expressed their willingness to pursue enforcement actions with industry. Most European systems have backdrop legislation.

The subgroup discussed the fact that Internet sales would be more difficult to enforce. The Customs Service would need to be involved in enforcement for overseas Internet sales. The Interstate Commerce Commission may need to be involved in enforcement for domestic sales.

### Historic Products

The first issue discussed was the fairness of today's customers paying for the collection and processing of old products that were purchased years ago. Industry stakeholders also discussed the fairness of the Dutch IT system, which assesses the fees for each producer based on the number of units being returned for recycling. Companies that had a large market share years ago, and may have a small market share now, would be responsible for the majority of the recycling system costs. Several suggestions for handling historic products were made:

- Set an ARF high enough to cover costs of historic waste
- Collect an ARF, but do not disburse funds until a fund has been built up that would be large enough to pay for historic waste
- Use a separate mechanism, like an EOL fee that is eventually phased out, to cover historic waste

The subgroup discussed what exactly defines waste as historic. It was suggested that all products covered by a front-end fee could be considered historic. To clearly define waste as historic, a cutoff date could be established, such as after the date of implementation of the system. The subgroup began to question how problematic historic waste might really be. Some members suggested that if the rate of return of historic products were not actually higher than the rate of new product sales, then there wouldn't be a shortage of funds to cover recycling. Some study of the potential flow of materials and funds could help determine the potential significance of this issue.

### Orphan Products

Products are considered orphans if their manufacturers do not exist anymore. Because of corporate mergers, it is often difficult to determine whether a product is really an orphan or not.

**There was general agreement among all stakeholders that an ARF at the new product point of sale could cover orphan as well as historic products.** The subgroup members noted that although it may seem unfair to have consumers pay for recycling waste from past purchases, the fact that today's consumer base is so much broader dilutes the share of those costs that have to be borne by each new product purchase. It is less fair to have the general taxpayer subsidize program costs since people who never have bought a computer would be burdened.

The concern over keeping fees low was discussed again. Periodic reviews and adjustments of fees could be instituted to ensure that consumers are not paying more than needed to cover actual program costs.

### Cost Effectiveness

Cost effectiveness is a big concern for all stakeholders. There is a need to clearly define exactly what costs are to be covered by the program. Categories of program costs are:

- Costs of setting up a third-party organization
- Administrative costs associated with operating the third-party organization
- Administrative costs of retailers collecting/tracking/handling the fees
- Transportation costs – what portion of total costs?
- Collection costs – what portion of total costs?
- Recycling costs
- Cost savings - if revenues are derived from reuse options, who keeps these funds?

The group discussed the potential mechanisms for keeping costs at a minimum. There was general agreement that state and local governments can perform the collection duties in the most cost-efficient manner. Members expressed the need to set up the system in such a way that it allows market forces to create incentives to lower costs. The system must also be designed to avoid a high-overhead, bureaucratic third-party organization. Options for program administration enumerated were:

- Government administration – although most stakeholders agreed that this would not be the most efficient system. In addition, stakeholders noted that, if the government administered the program, there was a risk that funds might be used to subsidize other government programs in times of fiscal distress.
- Third-party organization with a multi-stakeholder board of directors
- Third-party organization managed by industry (similar to the SWICO system, which has a volunteer board and contracts recycling, certification, and auditing functions)

The subgroup adjourned for the day and agreed to meet before the plenary session Friday morning to continue discussions.

### **FINANCING SUBGROUP - SESSION III: MORNING, JANUARY 25, 2002**

Since the group completed the discussion of industry's key concerns with front-end fee systems in the prior session, the focus of this morning's discussion was the concerns of local government and NGOs with front-end fee systems.

Government stakeholders explained that front-end fees should be high enough (and the system should be flexible enough) to allow local governments to be reimbursed for some of the additional costs of collection and transportation. If there were no mechanism for reimbursement, then residents would have to be charged a second fee to cover these costs, and such double charging would be highly undesirable. Also, if local governments were reimbursed, they could

include charities, reuse organizations, repair shops, and other parties in the system. This would allow the private sector to encourage additional collection and recycling/reuse.

Industry stakeholders agreed that involvement of a broad range of actors could have a positive effect, but warned of the need to control costs. A dollar value per pound of product collected might be one mechanism for reimbursement.

Government stakeholders explained that some communities would require more reimbursement than others. For example, a community or region with permanent household hazardous waste facilities may need very little assistance, possibly just transportation to a regional consolidation facility. Other communities may not have any infrastructure available and may therefore need help with periodic collection events and transportation to a regional consolidation facility. Local governments would only be seeking reimbursement of incremental costs associated with electronics collection. A periodic review of front-end fees should be undertaken so they can be adjusted to reflect the actual costs of the system.

Several stakeholders reiterated the need to establish a low-cost system and to integrate mechanisms that allow competition so there are inherent drivers to continually keep costs low. The system should not preclude OEMs from handling their own equipment so that they could take advantage of potential cost savings derived from recovering valuable materials.

Government stakeholders also expressed the need to certify recyclers to ensure that sound recycling is taking place.

Another concern of government stakeholders is public education. They are ready to play a substantial role in public education and feel that a visible fee is a direct and immediate mechanism for educating the consumer about a service they will receive in the future. They feel that the public education message is more difficult to craft and less effective when the fee is at EOL (i.e., when a resident is returning a product for recycling). Stakeholders suggested that product manufacturers could play a role by including some information about a front-end fee system in the new product literature. Recyclers that are under contract as a participant in the national system could also conduct some advertising.

Industry stakeholders recognized the issues and concerns of local governments, but expressed their desire for local governments to commit some financial resources. Local government stakeholders responded by citing their lack of excess funds and the fact that the general taxpayer should not bear the burden associated with a specific group of consumers. Government stakeholders repeated that they are willing to provide assistance with enforcement, facilities, handling of illegal dumping, economic development and other tax incentives for recyclers, procurement policy, public education, and some portion of collection costs.

One NGO stakeholder expressed his concern with a front-end system that uses a flat fee. This stakeholder felt that a flat-fee system would not reward companies for investments in greener product designs and that internalizing the costs of recycling would go further in reaching green design goals. Since green design is an important mechanism for reducing the costs of recycling,

the stakeholder suggested that a mix of tools might be appropriate.

Industry stakeholders responded by saying cost internalization mechanisms that drive green design could be a long-term goal. They pointed out, however, that products with lead-free solders are just being introduced to the market and it is not yet known how such a green design change will impact the costs of recycling. By reducing fees based on green design without waiting for feedback from recyclers, the system may be caught short if recycling costs are actually higher.

In the last few minutes of this session, the subgroup leaders reviewed the progress made in the discussions over the past two days. Stakeholder groups have articulated key concerns and are engaged in finding solutions that address each concern. Also, the subgroup has a better understanding of ARF systems and has developed some good strategies and a list of information needs for solving some of the concerns and complexities. The list of needs includes:

- Information on the costs of recycling. This information will be used to estimate the level of the fee that would be needed.
- Information on mechanisms for controlling the costs of municipal collection and transportation.
- Data to help define the minimum level of service.

It was suggested that a small group should mock up a financing system structure that addresses the concerns as discussed and should present it to the whole subgroup for discussion during the next conference call.

The subgroup adjourned to join the plenary session.