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Recycling Saves Money

Recycling: Back to Basics Part II

When it comes to making the bottom line in running a business, every bit helps. Recycling can reduce your garbage disposal costs and occasionally produce revenue. A few points to see if a recycling program makes “cents” for you:

- **Avoided cost.** Disposing of a given volume of garbage normally costs more than recycling the same volume of materials.
- **Revenue.** There are markets in King County for many recyclable materials, including metals, cardboard, white office paper and other commodities.
- **Public Relations.** Recycling is appreciated by your customers, and is a source of pride for your employees. Recycling builds employee and customer loyalty.

How does recycling work in real life? Here are some local and national examples:

IN KING COUNTY:

- Brandrud Furniture of Auburn recycles 80 percent of its wastes, including solvents and thinners, foam scraps, wood scraps, sawdust and fabric. The company reports significant savings on disposal fees.
- Midas Auto Systems Experts of Bothell, Bellevue, Issaquah and Kirkland recycles over 60 percent of its waste. The four-store brake and exhaust specialists get rid of surplus materials through the Industrial Materials Exchange (IMEX), and also save money by purchasing used 16-gallon drums through IMEX.
- Uwajimaya (*locations in Bellevue and Seattle*) saves an estimated \$900 to \$1,200 per

month by recycling cardboard, office paper, glass and aluminum. Uwajimaya also composts vegetable wastes.

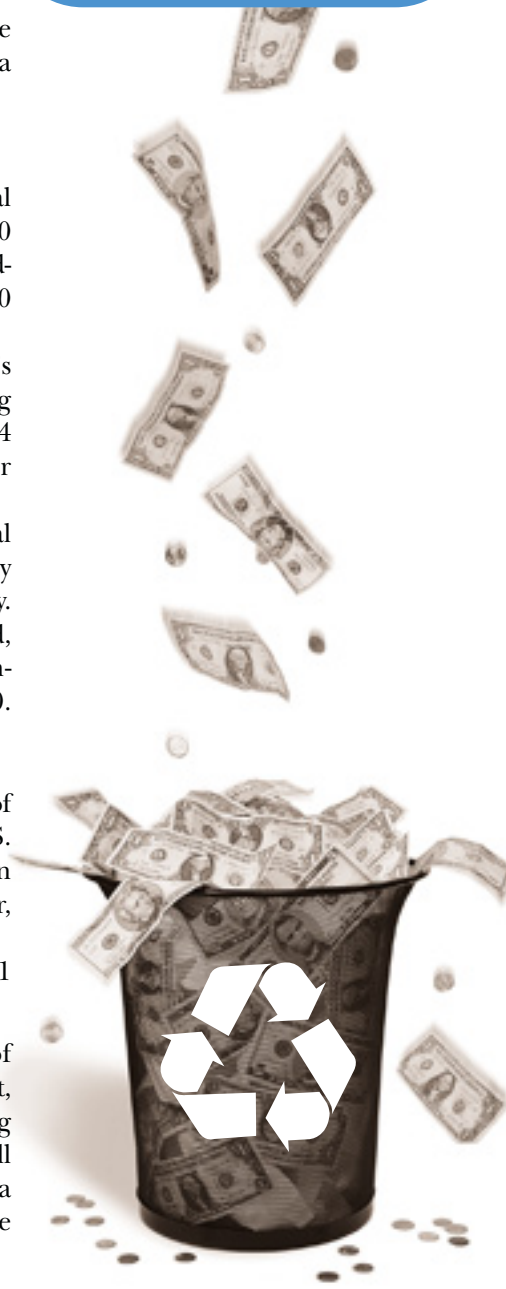
IN SEATTLE:

- The McKinstry Company, a mechanical contractor located in Seattle saves \$4,800 per year recycling mixed paper and cardboard, and makes an additional \$40,000 annually selling scrap metal.
- Ray’s Boathouse, a restaurant on Seattle’s Shilshole Bay, has an 80 percent recycling rate that cut their disposal costs by 64 percent in the first four years after instituting a recycling program.
- Seattle’s Westin Hotel recycles the usual commodities, even kitchen grease. They also donate unserved leftovers to charity. 30 percent of the hotel’s waste is recycled, equaling 280 tons annually with combined savings and revenue of \$30,000.

ACROSS THE NATION:

- Texas Instruments recycles 81 percent of non-hazardous solid waste in its U.S. operations, saving at least 10 percent on manufacturing resources each quarter, or a minimum of \$16 million.
- Apple Computer reports savings of \$1 million per year from recycling.

Can your business generate millions of dollars in savings via recycling? Perhaps not, but savings could be significant. Call King County Green Works at 206-296-8000. We’ll help you set up a recycling program, find a recycling collection service and calculate your savings. ♻️



Debunking the Myths:

Recycling versus Landfilling

Which truly makes more sense?

During the past 30 years, we've made great strides starting and expanding recycling programs, both for households and businesses. We can be proud of effective recycling programs that conserve natural resources, landfill space and dollars.

Still, there are those who have raised questions about the value of recycling. We think such skepticism is based on misperceptions or myths. Here are our responses to four common myths.

MYTH #1: Landfill space is cheap and abundant, so we don't need to worry about landfilling garbage or running out of landfill space.

LANDFILL FACTS: Admittedly, landfills don't occupy much space in relation to overall land mass. In fact, there are fewer landfills operating today than 15 years ago. In 1988, there were 8,000 landfills in the U.S. Today, there are closer to 2,300. Newer landfills have more capacity, however, and that's by design.



Myth or Fact?

Why? It's harder to site landfills than it was twenty years ago. Whenever a new landfill is proposed, neighbors have the right to review and oppose site plans. Environmental impact plans must be drawn up, and EPA's upgraded regulations on maintenance, including sanitary liners, leachate collection systems, methane management and water monitoring must be addressed.

The result is that while today's landfills are better engineered and more efficient, they're also more expensive.

At its current recycling rate, the U.S. saves the equivalent of over five billion gallons of gasoline, reducing dependence on foreign oil by 114 million barrels.

RECYCLING FACTS: Recycling is less expensive than landfilling because it avoids disposal costs and extends the life of existing landfills.

Furthermore, conserving landfill space is not the greatest environmental benefit of recycling.

What are the most critical benefits? Recycling:

- preserves natural resources
- reduces the production of greenhouse gases
- reduces pollution created when raw materials are extracted (strip-mining and clear-cutting, for example)
- saves energy when recyclable materials are used to make new products

These benefits are worth the additional environmental burdens that result from processing and transporting recyclable materials.



Myth or Fact?

MYTH #2: Recycling has peaked; people and businesses are no longer interested in recycling. And we can only recycle 25 to 30 percent of our solid waste anyway.

FACT: Participation in recycling programs is growing. Businesses in King County continue to start and expand recycling programs.

With convenient residential recycling collection services, King County and the City of Seattle recycled at 39 percent at the start of the new millennium. From 1987 to 2001, Washington state's recycling rate rose from 18.3 to 37 percent.

How much can we recycle? 60 to 80 percent of our waste stream is recoverable through recycling and reuse.

How? First, we can recycle more of the materials that are recyclable. The U.S. still throws out 57 percent of its office paper. We can also compost organic materials such as yard waste and food discards, and textiles and construction materials can be reused and recycled.

see **"RECYCLE v. LANDFILL"** page 5

Computer Recovery Project Expands Service

Computers, televisions and other electronics that use CRTs (cathode ray tubes) contain hazardous materials such as lead, cadmium and mercury that should not be disposed in landfills. Recycling is the preferred alternative, and in some instances, the only legal option.

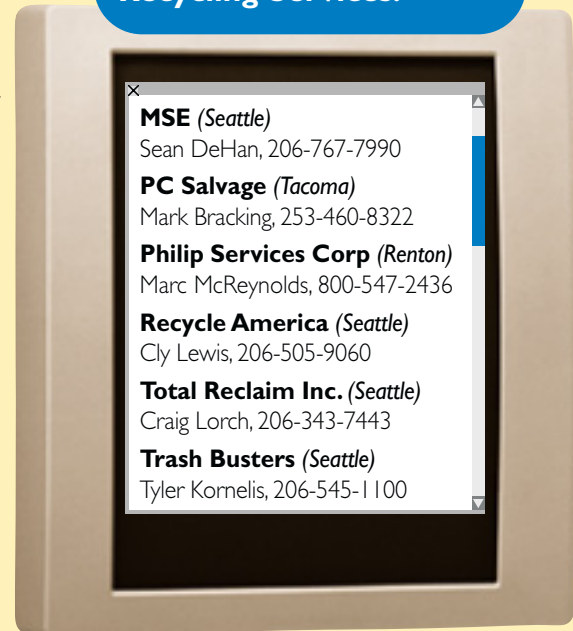
To provide residents and businesses with expanded recycling options, King County, Snohomish County, and the City of Seattle are developing a large network of local businesses to handle recycling for computers, computer monitors, peripherals, and televisions. This "Take It Back Network", now in the early stages of development, will also explore recycling and reuse services for cell phones, electronics appliances and other consumer goods.

The hope is to eventually develop a national recycling system for electronics materials.

If your business generates large amounts of recyclable electronics, see right for the newly expanded list of recycling vendors and collection services. These vendors may also be able to provide services to electronics retailers, repair shops, charities, thrift shops and other businesses interested in acting as electronics collection sites.

Remember to call first for acceptance policies and pricing. For residents or businesses with smaller quantities, see the entire Computer Recovery Project collection site list at <http://dnr.metrokc.gov/swd/crp.htm>, or call 206-296-8800. ☺

Large Quantity Electronics Recycling Services:



Quarterly Update

*Saturday Night Live has **Weekend Update**. Not to be outdone, the King County Green Works Newsletter now proudly presents its **Quarterly Update**. This new column will provide periodic updates on topics of interest and importance covered in previous issues of the Green Works newsletter.*

Hazardous Waste

See background story in the Spring 2002 issue at <http://dnr.metrokc.gov/swd/bizprog/news/recycling.htm>.

Recycle Those Fluorescent Lamps

Fluorescent lamps use less energy, but they also contain mercury. That's why in 2000 Washington State passed a regulation banning mercury-filled fluorescent lamps from being dumped into state landfills. In response, the Local Hazardous Waste Management Program in King County (LHWMP) has been educating businesses about the regulation. Since the start of the program, 20 percent of all mercury-filled fluorescent lamps have been diverted from area landfills.

LHWMP can provide local businesses with technical assistance on how to properly remove and recycle used fluorescent lamps. For more information, call 206-263-3080, or check the website at www.metrokc.gov/hazwaste/lhwmp/fluor3.pdf.

In addition, fluorescent lamp recycling may qualify for LHWMP's Voucher Incentive Program for small quantity generators of hazardous waste. The program reimburses qualified businesses for 50 percent of the cost of lamp and ballast recycling/disposal, up to \$500 per site. For information, call 206-263-3038.

Recycled Products

The Summer 2002 issue focused on recycled products. Please check out the website at <http://dnr.metrokc.gov/swd/bizprog/news/recycling.htm>.

Urban Wood Waste Makes Great Furniture

King County's LinkUp program, developed to encourage businesses to use more recycled materials, has recruited companies that find new life for everything from used tires to milk jugs, broken concrete to sunflower seed shells.

Now LinkUp has found a company to reuse urban wood waste. Urban Hardwoods of South Seattle collects and hauls mature trees removed by tree service or utility companies, then recycles the wood into quality products with very high resale value, including fine furniture and cabinets. Without this service, the downed trees would likely be chopped for firewood, chipped for ground cover or disposed of in a landfill.

For more information about the LinkUp program, contact Erv Sandlin at 206-296-0233 or visit <http://dnr.metrokc.gov/linkup>.

King County Wins National EPA WasteWise Award

Last October, the County received a 2002 "Partner of the Year" award from the EPA WasteWise program. The EPA recognized King County government for its outstanding efforts to recycle, reduce waste, and buy products made from recycled materials.

King County is one of only two local governments to be awarded this national honor. More than 1,200 businesses and agencies are partners in the WasteWise program nationwide, including major corporations and large government agencies.

King County's award was based on its WasteWise evaluation report for 2001, describing waste reduction and recycling-related efforts by County agencies. Those 2001 efforts included:

- Collecting 4.4 million pounds of recycled materials, including more than 1.5 million pounds of paper.
- Eliminating paper copies of financial reports, an estimated 600,000 pages annually saving printing costs of \$16,000.
- Reusing motors from old trolley buses for 100 new trolleys, saving an estimated \$20 million.
- Redistributing more than 4,000 surplus items to County agencies with an estimated total value of more than \$1.5 million.
- Purchasing an estimated \$3.8 million dollars worth of "environmentally preferable" products, including products that contain recycled content, reduce waste, use less energy, are less toxic, or are more durable. Cost savings from these products were calculated at \$580,000.

On a day-to-day basis, King County's successes in waste reduction and recycling have been a process of ingenuity and improvement. At King Street Center, a

recent internal email reminded staff members about new and ongoing programs, including:

- Plastic bags and plastic wrap recycling, with recycling barrels located in freight elevator lobbies and loading docks accepting pallet and shrink wrap, bubble wrap, plastic wrap and bags.
- Polystyrene packing peanuts collection for reuse, with barrels located adjacent to those for plastic wraps and bags.
- Cans and bottles recycling, made possible via "built-in" recycling bins located under counters in kitchens and hallways throughout the building.
- Paper recycling, via deskside containers, in copy rooms, meeting rooms and kitchens.
- Office supplies reuse, facilitated at Office Supply Exchange Areas, where employees can take or leave used binders, folders, envelopes, scratch



King County Executive Ron Sims and County staff receive award

pads, in-boxes, desk lamps and many other supplies.

- Toner cartridge recycling, for all printers and copiers.
- Battery collection, in pails located on three floors at King Street Center. Any dry-cell batteries are accepted, including disposable alkaline batteries, cell phone batteries, rechargeable batteries, button-type batteries, and lithium batteries.

For assistance with your company's waste reduction and recycling program, call King County Green Works, the experts that made it happen in their own offices, at 206-296-8800. For a full report on the 2001 accomplishments of the King County WasteWise program, go to <http://dnr.metrokc.gov/swd/wastewise/report.htm>. ☺

Put Compost on Your Business Menu

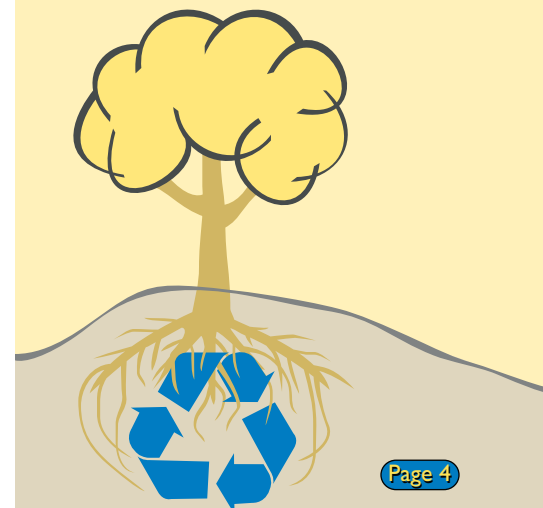
No matter how good the cook is, you'll always find leftovers destined for the garbage can. Particularly for restaurants and food processing companies in King County, waste is an expensive problem. But now it's also an opportunity.

King County is looking for a few companies to participate in a pilot program involving on-site composting. Through the use of small scale, in-vessel (completely enclosed) composting systems, these companies will be able to turn food waste into compost for on-site landscaping and fertilization needs.

On-site composting can provide substantial savings on your garbage bill. Better yet, the County's pilot program is offering significant financial assistance in getting set up. Participants simply agree to provide regular data and reports on the use and performance of the food composting system.

The County has a limited amount of funding for this project, so if you are interested, don't wait. Call right away! Contact Kinley Deller at 206-296-4434 or kinley.deller@metrokc.gov.

Turn food waste into compost—and save money on disposal costs!



Spotlight on Success

Brookfield Veterinary Hospital

Recycling versus Landfilling

“RECYCLE v. LANDFILL” cont’d

MYTH #3: Recycling doesn’t make economic sense.

FACT: Efficient recycling programs—whether in your business or in your municipality — are quite cost-competitive with garbage disposal.

We don’t expect trash collection or landfill disposal to pay for themselves, nor should we expect this of recycling. Recycling isn’t free. The real issue is how the long-term costs of recycling compare to those of alternative waste management methods.

It costs money to collect and process recyclable materials. On the positive side, however, recycling programs avoid garbage disposal costs and earn revenue from the sale of recyclable materials.

Recycling more material makes collection programs more efficient. And higher recycling rates reduce the costs of garbage collection.

The bottom line for your business? An increased recycling rate, lower garbage volume and revenue from recyclable materials can provide substantial cost savings for your business. (See cost savings stories on page one.)

MYTH #4: Recycling is kept alive with government intervention and expensive tax subsidies.

FACT: Government has provided vital leadership in building and maintaining landfills that meet EPA regulations, setting up recycling programs and providing public education on recycling and waste reduction. But government isn’t the primary force behind recycling.

It’s residents, businesses, recycling companies and recycling markets that really keep recycling alive. They see the economic and ecological sense to recycling, and that’s why recycling rates will continue to grow well into the 21st century with your continued support. 🐾

Brookfield Veterinary Hospital in downtown Redmond promotes “compassionate, gentle care for your pet.” With their conservation practices, they are also compassionate and gentle with the environment.

For many years, the hospital has taken waste reduction and recycling seriously. Paper, plastics and cans are recycled. Pet owners are asked to fill out laminated charts with patient information, rather than using paper forms. Chart information is entered into a computer, and charts are wiped clean and reused over and over again.

Then Meredith Sloane, hospital receptionist, took Brookfield’s commitment to the environment to a higher level. Working with King County Green Works representative Alexandra Scott, Sloane completed a goal form outlining new recycling and waste reduction strategies. With a little ingenuity and a lot of determination, Brookfield now:

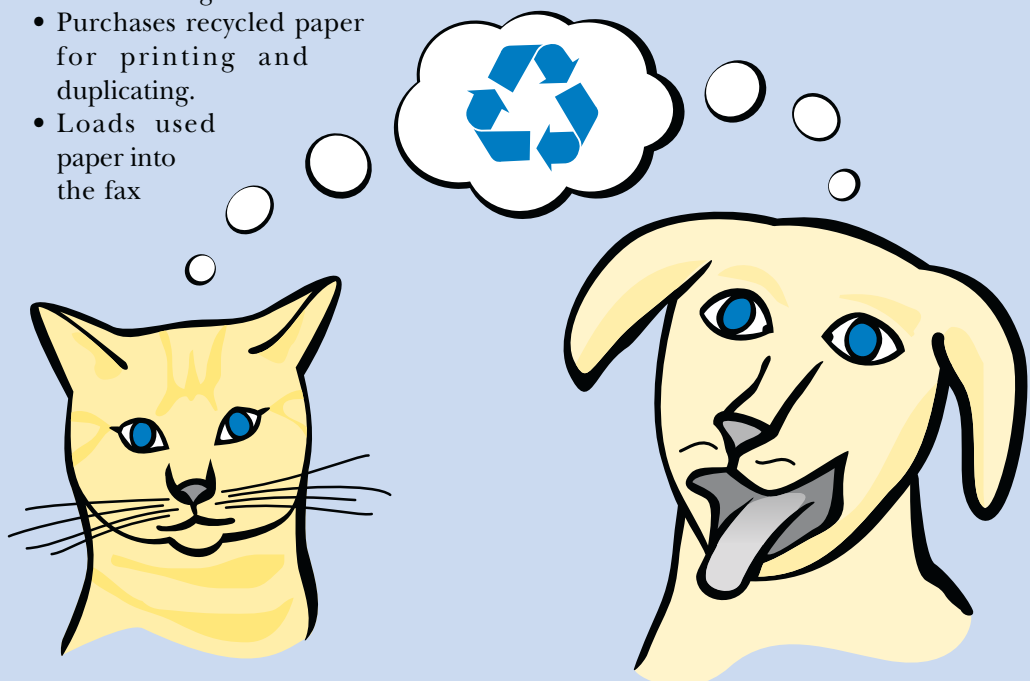
- Uses durable dishware instead of paper plates and disposable utensils. While paper coffee cups still work better for clients, staff now use reusable mugs.
- Purchases recycled paper for printing and duplicating.
- Loads used paper into the fax

machine for printing on the 2nd side, cuts and staples used paper to make scratch pads, lines pet cages with used paper or shreds it to make kitty-litter.

- Takes packaging materials such as bubble wrap and Styrofoam peanuts to nearby mailing services, which gladly accepts and reuses them.
- Takes odd items that are normally thrown out, like cardboard fittings for x-rays and pet tags, home for craft projects.
- Whenever possible, cleans office areas with washable, reusable rags (paper towels must still be used in patient treatment areas for sanitary reasons).
- Requests removal from junk fax lists.

The results? Paper use has dropped dramatically, by approximately 65 percent. Sloane says that junk faxes have been reduced from three or four per day to one every three days. Customers continue to be impressed by the reusable, laminated patient charts and other waste reduction practices at Brookfield.

To set your waste reduction and recycling goals, and receive assistance to reach them, call King County Green Works at 206-296-8800. 🐾



So what is **Green Works?**

King County Green Works is a waste prevention and recycling assistance program for businesses. It is sponsored by the King County Solid Waste Division along with partnering suburban cities. If your business needs help reducing waste, locating recycled-content products or finding recycling vendors for office waste, contact our business assistance team. We can also provide information and referrals on energy and water conservation.

King County Green Works Newsletter is a quarterly publication produced by King County's Solid Waste Division. Inclusion of a business, product or service in this newsletter does not constitute an official endorsement or sponsorship by the Division or by King County. Please send questions, story ideas or other suggestions and comments to Dale Alekel, Green Works newsletter manager, at dale.alekel@metrokc.gov.

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This material will be provided in alternate formats upon request.

To contact us:

Phone: 206-296-8800

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Website: www.metrokc.gov/greenworks

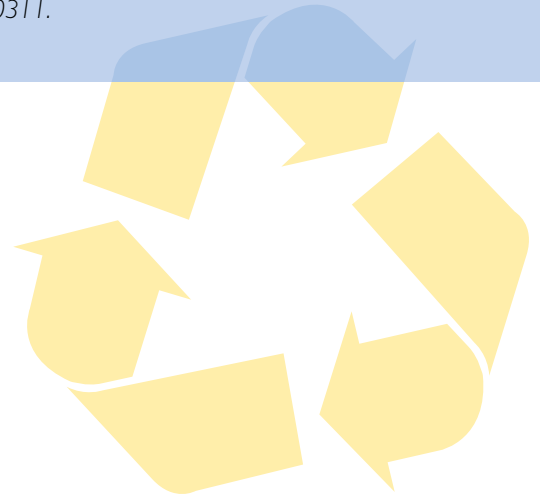
Fax: 206-296-4475 • TTY Relay: 711

WSRA Nominations Due

The Washington State Recycling Association recognizes individuals and companies for excellence in recycling. Nominations are requested in the following award categories:

"Recyclers of the Year" awards: Individual; Business Primary; Business Generator; Public Agency; Institution. Other awards: Recycling Innovation; Outstanding Public Education.

Nominations are due March 15, 2003. Awards will be presented May 6 at the WSRA Annual Banquet in Spokane. Nomination forms and criteria for award categories are available at www.wsra.net or by calling 206-244-0311.



What Have We Here?
We at King County Green Works—producer of this newsletter—take pride in putting into practice what we preach. This newsletter is printed using soy-based inks on French Paper Company's Speckstone Basics—Pepper Off—White—an acid and chlorine free 100% post-consumer non-deinked recycled paper.



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The Do-It-Yourself Business Guide to:

Plastic Film Recycling: It's a Wrap

"I've got one word for you...Plastics"

In an early scene from the sixties classic film "The Graduate," Dustin Hoffman is cornered by one of his parents' friends at a welcome home party. The man tries to convince Hoffman that the secret to his future career success is in plastics.

Hoffman's character ignores the advice, but when it comes to the future of recycling, plastics definitely have potential.

When you think about recycling plastics, what comes to mind? Most of us tend to think in terms of plastic bottles and, indeed, Americans recycled over 685,000 tons of plastic bottles in the year 2000, an all time high. But did you know that the United States produces more than 6,000,000 tons of plastic film annually?

So what is plastic film and what do we use it for? We use plastic wrap on nearly all manufactured goods at some point in their life cycle. We use it as shrink-wrap, stretch wrap, garment bags, grocery bags and bubble wrap. And businesses, both here in King County and across the country, are paying garbage haulers to dispose of tons of plastic wrap.

For many companies, plastic wrap constitutes a large portion of their waste stream. For that reason, companies are starting plastic film recycling programs that may provide bottom-line savings through reduced garbage costs.

There are a number of local recycling companies that collect plastic film. (See list below.)

If your company is already doing business with one of these recycling companies, ask your representative about adding plastic film waste to your existing recycling program. If you do not have a recycling program or are working with a recycler who does not accept plastic film, contact one of the companies on this list to find out if they can provide recycling services for your plastic film waste.

For example, Marathon Recovery, a division of Boise Cascade Corporation, offers a recycling program for companies that are smaller generators of plastic film waste, with minimum pickup of 1,000 pounds of plastic wrap per month. For lower volumes, Marathon may be able to combine collection of your recyclable plastic film with other suppliers located nearby.

Marathon Recovery provides collection boxes and bags and collects the material once or twice a month. They also offer a free 60-day evaluation and can help you create your own plastic wrap collection procedures. For more information contact Marathon Recovery at 253-872-0779. ☺

Commercial Waste
 Reduction & Recovery: 206-772-4745
 Fibres International: 800-845-8853
 Marathon Recovery: 253-872-0779
 Rabanco Recycling: 206-763-2800
 Sea-Dru-Nar Recycling: 206-467-7550
 Smurfit Recycling: 425-656-0110
 Waste Management: 206-762-3000
 Weyerhaeuser Recycling: 206-682-1035



Film Studies: A Case History in Plastic Recycling

Associated Grocers, Inc., Seattle
 Associated Grocers of Seattle is a large northwest grocery distribution firm servicing approximately 355 retail grocery outlets in Washington, Oregon, Alaska, Hawaii, and Guam. The Seattle distribution center ships over 125 truckloads per day of perishable food and non-durable grocery products.

Associated Grocers operates a "bring-back" program to capture post-consumer plastic film bags. AG also generates plastic film during the handling and distribution of its merchandise. Specific films recovered by AG include grocery bags, merchandise bags, shrink wrap, pallet and stretch wrap.

Most months, the distribution center generates as much as 20,000 lbs. of waste plastic film suitable for recycling.

Grocery stores participating in the "bring-back" program place bags and racks at the front of their store for use by customers. When full, the bags are consolidated in the shipping and receiving area for return delivery to the AG distribution facility in Seattle. Plastic films generated during product handling are also bagged at individual stores, combined with "bring-back" program bags. At the distribution center, truck drivers transfer bagged plastic film from their trucks to a dedicated 40-foot trailer.

Let's be CLEAR about plastic film

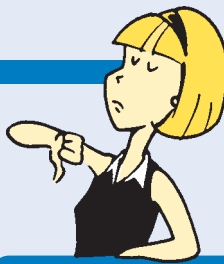
Plastic film and bags make up more than half of the total plastic waste collected in King County.

88.8%	All Other Waste
6.2%	Plastic Film & Bags
5%	Other Plastic Waste

Source: 1999/2000 Comprehensive Waste Stream Characterization and Transfer Customer Surveys—Final Report, King County Department of Natural Resources, August 2000.



Citizen Plastic



Citizen Plastic may be the best film of the year and will no doubt get the attention of OSCAR (Organization for Saving Commodities and Resources) voters in the category of most compelling film on the subject of plastic film.

Other nominees include the family feature *Honey, I Shrink(wrapped) the Kids*; the science-fiction flick *Plastic Trek: The Next Generation*; the classic *Gone With The Film*; the phenomenal *Saving Private Plastic*; the cult classic *The Agony and the Ecstasy of Plastic Film*; the groundbreaking *The Wizard of Film* and the sad but beautiful *A Wastestream Runs Through It*.

Danny DeDumpster is sensational as Dewey Recycle, the inspired plant manager for Widgets Are Us, Inc., who is looking for a way out of a seemingly irreconcilable dilemma over what to do

with the excess plastic film the company handles. Dewey becomes an inspiration to others when he contacts his local hauler to explore alternatives for taking care of his excess plastic film. Dewey learns that there are growing markets for recycled plastic film and that recycling his plastic film might also save the company money on their disposal costs.

Once our intrepid hero discovers that he can not only save money but also do something positive for the environment, he becomes an inspiration to all those around him. Set in the early 21st century, this timeless film illustrates that even characters like Dewey can make a difference.

Two thumbs up for *Citizen Plastic*. It is good clean family entertainment with a message that will inspire generations for years to come. 😊



Penelope's Chatroom

Dear Penelope,

Our company recycles plastic bottles, paper and aluminum cans on-site. But we also throw a lot of plastic shrink-wrap into the garbage every day. It seems really wasteful to me. Can't this kind of plastic be recycled?

—Reynolds Rapp

Dear Reynolds,

The kind of plastic you refer to is called plastic film. It's possible your company could add plastic film collection to their recycling program. Consider checking with your recycling company to see if they offer plastic film recycling. If not, there are a number of recycling companies in King County who do offer this service. Check out King County's Recycling and Reuse Database at www.metrokc.gov/greenworks and select "Reuse and Recycling Database."

Dear Penelope,

Do they really make plastic lumber out of recycled plastic film and milk jugs? Sounds like your deck could become a big Slip-n-Slide when it's wet. Seems kind of dangerous, don't you think?

—Slick Willie

Dear Slick,

Some plastic lumber is manufactured with a wood texture, some is mixed with wood waste. Many plastic lumber products have a paraffin base, and just like surf boards that are waxed for traction, it becomes less slippery when wet. Plastic lumber is also stain-resistant, can be cut, drilled and sanded like real wood, but won't rot, crack, split or warp. So hang ten, keep recycling and try plastic lumber on your next decking project.

Five Steps to Starting a Plastic Film Recycling Program

Step 1: Understand your plastic film waste

Identify the types and quantities of plastic film in your waste stream. How much plastic film waste do you generate? What film is recyclable, and what isn't?

Step 2: Assess the economics

Conduct a cost-benefit analysis to assess potential cost savings. Will recycling plastic film result in a smaller dumpster for your general waste? How much can you save on your garbage bill? Even if you can't save money, still consider recycling as a way to manage your waste.

Step 3: Develop a recovery strategy

Analyze collection points. Do you generate plastic film at retail, in receiving, shipping, the warehouse or other locations? How and where can you best consolidate these materials?

Step 4: Establish storage & handling protocols

Find adequate space for storage and determine how material will be handled. If storage and handling of materials isn't convenient, your employees won't go along with the program.

Step 5: Implement education & quality controls

Minimize contamination through employee education and signage. Contaminants—dirt, grease, staples, labels and other packing materials—will make your plastic film less recyclable.

AND, during any of these steps, call Green Works for tips and assistance, 206-296-8800 or visit our website www.metrokc.gov/greenworks.