

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

1: Harford County, MD

The benefits of recycling outweigh the costs --Economist --The costs of recycling outweigh the benefits --Michael Munger --Recycling is better for the environment --Adam Beazley --Electronic waste is a major recycling problem --Elizabeth Grossman --Recyclers and governments are tackling the e-waste problem --Andrew K. Burger --Curbside.

Why did I receive the cart hanger? The cart hanger is being distributed to residents with curbside collection services this week in order to provide some context on the economic issues impacting recycling markets and to provide updates on our own program. Recycling programs across the U. Recycling is facing some challenges, but still delivers significant environmental benefits through conservation of natural resources and energy savings for manufacturing. I keep hearing about China. What role do they play in recycling? Recycling is a business enterprise, and recyclables “ or recovered materials “ are bought and sold in worldwide markets for use as raw materials in manufacturing. As recently as , some 35 percent of all recyclables collected from programs in the U. Exports to Chinese markets took off in the mids as programs around the U. The Chinese government started to impose more stringent quality standards on imported recyclables almost five years ago, and last year began to drastically scale back on the number of import licenses granted. Other markets are beginning to emerge or develop, including in Southeast Asia. There are also renewed efforts to build more recyclables end-markets here in the U. What is the impact to recycling in the U. All of this has caused significant market disruptions as recyclables processors look for new markets to sell to and as they spend more money to produce cleaner materials. Many materials recovery facilities MRFs have had to make expensive investments in additional sorting systems and technologies, hire more staff and reduce the speeds on production lines in order to ship higher-quality materials. Because of the costs associated with meeting new quality standards, and the low and sometimes negative market values of some materials, some recycling programs have stopped accepting certain recyclables, most notably lower value mixed plastics, mixed paper and glass. What is the financial impact in Arlington? Arlington County historically has earned revenues on the recyclables collected in our curbside recycling program. The County is helped by the fact that we have a long-term contract for processing our recyclables, which spreads risk out over multiple years, and helps protect us from more drastic pricing fluctuations. While recovered materials market watchers do believe that the current market conditions will remain in play for the next couple of years, they also believe that the prices have bottomed out. Will my household solid waste rate increase because of this? There are no planned increases to the household solid waste rate. However, commercial businesses and multi-family properties may already be seeing increases in their trash and recycling service fees. Will the recycling program in Arlington change? There are no anticipated changes for recycling metals, plastics, paper and cardboard. However, the County has received the OK to promote placing glass in the trash over disposing it in the blue recycling cart. Glass has historically held a negative market value due to the lack of regional glass processing capacity and markets, the difficulty in generating clean glass in the single-stream recycling sorting process, and high cost of transporting it. The County will most likely begin promoting this change sometime this fall. The glass will be processed at the plant and used as a substitute aggregate material for roads and streets. Are we going to change back to dual stream or curb-sort recycling? Single-stream recycling has been a great innovation in recycling. It has lowered collection costs which has brought tens of millions of Americans into recycling programs. However, single-stream recycling has also made us “ residents, businesses, recycling processors and end-users “ a little less diligent about recycling the right way. Recycling right will be the focus of much of our outreach in the coming months. What has been the biggest change to our recycling stream? The number of products packaged in plastics has grown tremendously. Not all plastics “ especially things like plastic bags, film, and Styrofoam “ are recyclable in curbside recycling programs, but many product and package labels often lead well-intentioned people to believe that they are. This can decrease the quality of the recycling stream. Unfortunately, the responsibility for sorting out how to recycle many of these materials, and how to

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

educate the public on them, has been borne by recycling processors, end-users, and local governments, instead of brands and packaging designers. Also, the make-up of our recycling stream has undergone rapid transformations. Twenty years ago, paper and cardboard combined to make up around 75 percent of the weight of a typical ton of curbside recyclables. Today, that number is closer to 50 percent due to the influence of digital media and shrinking newspaper and magazine subscription levels. How can I help? Make sure food and beverage containers are empty before placing them in the cart. Do a quick rinse for recyclables that contain a thick residue like peanut butter or spaghetti sauce, or wipe with a paper towel. Keep food-contaminated paper such as napkins and paper towels out of the blue carts. The same goes for pizza boxes that are soaked in grease. Dry and relatively grease-free pizza boxes are acceptable. Look for products that come packaged in easily recyclable materials like aluminum and steel cans, plastic bottles for soda, water, juice, milk, detergent, shampoo, etc.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

2: Sorting out solid waste budgets

Note: Citations are based on reference standards. However, formatting rules can vary widely between applications and fields of interest or study. The specific requirements or preferences of your reviewing publisher, classroom teacher, institution or organization should be applied.

Do I need trash collection in order to have curbside recycling collection? Yes, the trash collectors are picking up the recycling as well as trash from their customers. Alternatively, County residents who do not subscribe to a curbside trash collection service can bring their recyclables, free of charge, to the Harford Waste Disposal Center located at Scarboro Road, in Street. What is single stream recycling? Single Stream recycling allows for the recycling of everything acceptable glass, plastic, metal, aluminum and paper to be set out all together in the same container and on the same day. It also increases the items that can be recycled at curbside, including all numbers of plastic containers i. Please contact your trash collector for the pick up day of your address. Most residents will continue with the same collection day as previously. The residential trash collectors in Harford County are: Harford County licenses, but does not endorse, trash collectors. Providing recycling containers was not economically feasible due to the expense involved. However, to make recycling convenient for residents, there is considerable flexibility in how recycling can be set out for collection. Recyclables may be placed together and set out in a variety of containers such as spare trash cans, new trash cans, corrugated cardboard boxes, even laundry baskets. They could also be placed together in paper bags for collection. In any event, plastic bags may not be used or disposed with the recyclables. The bags tend to foul up the single stream recycling processing equipment. I was only provided with one recycling sticker to place on my container to designate it for recycling. What if I have more than one container? If you wish to receive more recycling stickers, please call the Recycling Office at and one will be mailed to you. Where can they be recycled? Plastic bags create problems for the machinery used in the separation process so we are requiring residents not to place plastic bags in with curbside recyclables. Most grocery stores in Harford County accept plastic bags for recycling. Look for the bag container located at the front of the store. Please be sure there is nothing left in the plastic bags and that it is dry. We encourage everyone to begin using the re-usable grocery sacks also available from many sources. What type of plastics can I put out for recycling? All plastic containers with the number designations 1 through 7 on the bottom of the container including, narrow-necked and wide-mouthed, as well as rigid plastic such as toys, coolers, lawn furniture, drinking cups, garbage cans, laundry baskets, buckets, nursery pots, and flower pots. What happens to the paper, metal, glass, plastic and aluminum after it is collected from my house and how are they separated? Recycling is picked up at curbside by your trash collector and brought to the Harford County Recycling Transfer Station located at the Harford Waste Disposal Center where they are loaded onto tractor trailers and transported to a processing facility in Baltimore County. Click on the video link to see the operation of a similar facility in Elkridge, Maryland. The segregated material is then sent to secondary market vendors who process the material into re-usable products. Plastic is used to manufacture new containers, carpeting, and fleece clothing. Paper is used to make newsprint. Cardboard is used to make new cardboard and other packaging material. Glass is used to make new glass containers and fiberglass insulation. Aluminum cans are used to make new aluminum cans. Tin cans are used to make new steel products. What do I do if I need more than one recycling container; is there a limit? You may set out as many recycling containers as needed; there is no limit to the amount of recycling you can set out. Large items such as cardboard and rigid plastic items can be placed next to the containers. See the recycling container question if you wish to obtain additional recycling stickers. Alternatively, you may print off a recycling sticker by clicking the icon at the top of this web page. Can residents living in apartments and condominiums recycle? Maryland law requires that all apartment and condominium communities with 10 or more units provide a recycling program for residents on or before October 1, The amendment can be found on the Apartment and Condominium Recycling page. As a reminder, the State Law establishes the following

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

schedule to implement the program: For more information, please contact the Office of Recycling at or email harfordrecycles@menv.com.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

3: NPR Choice page

One reoccurring barrier was the lack of convenience for those who do not have a curbside program. In the words of Susan, "I'd certainly separate my trash if I could just roll it out to be picked up every week for free.

Recycle Clothes by donating them to worthy causes. Recycle Carpet, do not just throw it away. Cell phones and Electronics can be readily recycled or donated. Recycle Appliance also, especially when you purchase new ones. Earth has recycling options for other products. Milk, wine, soup, and many other items are using it. It weighs less than glass and keeps products fresh. We had to look into how recyclable it is. Tetra Pak addresses recycling and has many regions already recycling the product, including ours. We feel better about buying products using this now. Always rinse containers out before putting them in recycle bins. Recycling Eyeglasses and Sunglasses Got old eyeglasses laying around? Prescription changed, frame outdated, etc.. Unite for Sight helps take unwanted eyeglasses and sunglasses and distributes them to people in Africa. They find people with vision needs in the same ballpark as your glasses and gives them away. Any eyeglass, for most of these folks, is better than no glasses, even if the prescription is not exactly the same. Think of how many straws get tossed at fast food outlets. Many straws end up as plastic swirling in the middle of the Pacific Ocean. The San Francisco Zoo does not give out straws as they are a choking hazard to animals. Time to get green eco friendly straws. These straws are pretty stylish too. Recyclable Eco Friendly and Green Mailers We received an item in the mail that was packaged in a tear proof mailer. Our first thoughts were, is it recyclable? U-line makes several mailers that are recyclable. Many also have recycled content. They should also put a recyclable graphic on the back of the mailers. Be sure to donate unwanted items. To donate bicycles and related gear, visit wocinternational.com. Most residential curbside programs do not take nursery plant containers. Contact your local nursery and see if they take them back. Many only take back certain sizes. Recycleworks has a list of places that take them in the San Francisco Peninsula. Recycling Tyvek products, Tyvek Envelopes photo credit: Newone Tyvek Envelopes are made of a special rip proof high density polyethylene that can be recycled. Tyvek is also used in home construction. You can mail the envelopes to Dupont and they will recycle them. Waste Management also recycles them. Not convenient, but better than nothing. Tyvek is also used in shoe covers, boot covers, hoods, lab coats, aprons, sleeves and pants, which can be recycled here. We recently got an REI item shipped to us in a big plastic envelope. It was not Tyvek and lacked a recycling plastic number on it. We did verify with REI that it is recyclable. Recycle Gift Cards Gift cards made from the toxic plastic PVC are used all over the place, and are now filling up our landfill. It is time that more people recycled them. Refill gift cards if possible. Look for gift cards made from biodegradable materials such as corn. Support businesses that use these eco-friendly, green gift cards. Earthworks will take your old cards and recycle them. Collect a big batch and sending them to: Bedford, Oh Recycling by Mail Some folks live far away from recycling centers. Unfortunately, it does cost money to purchase a recycling kit, relegating this to probably only more dedicated green folks. RecycleBank gives points for recycling products. Turn these points into Rewards at over local and National retailers. They record the amount you recycle through the use of a special recycling bin. Request service for your area if you are not covered. It is good to know that they take recycling seriously and help their guests do it. Plastic Water bottles are all over the place. Now if they could go easy on all the lights and gaming machines! Solar panels all over the place anyone? Remember how long it takes for items to decompose: Every part of the automobile can be recycled with the proper resources. When a car is donated to a charitable car donation organization it is first determined if it is operable or if it can be repaired at a reasonable cost. If not, every part of the car is removed and refurbished for further use; this includes the doors, bumpers, engine, transmission, and even the radio and floor mats! The steel in the vehicle is perhaps the most recyclable, and each year over 14 million tons of steel from defunct automobiles gets recycled, this is enough to make almost 13 million new cars! It is interesting to note that steel is one of the few materials that can be recycled indefinitely without losing its strength, this means that the steel in your car

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

could have been used in numerous cars before and may be used in numerous vehicles to come. In addition, car recycling is beneficial because motor oil that may otherwise be dripping into the soil from a vehicle in a junkyard or another unused vehicle is safely removed, filtered, and reused in cars, schools, homes, and businesses. They are taking containers and collecting five or 10 cents a piece by recycling them at centers. The problem is that the local trash collector company counts on this revenue to help pay for disposal service. Less revenue would cause monthly collection rates to increase. Neighbors need to keep an eye out for thieves and to alert the authorities. When buying a new refrigerator, look for a top freezer model that is Energy Star certified as they are more energy efficient. If your refrigerator was made before , a new model will use half the energy. Luckily, most utility companies have refrigerator recycle programs, where you actually can get money back for turning in an old refrigerator. Check with your local electric or gas utility. If you have other appliances to recycle, most retailers will haul the old one away when you purchase a new one. Alternatively, You can also donate large and small appliances that are still in working condition to some local Goodwills, Habitat for Humanity Re store, or the Salvation Army. Recycling Paperback Books Recycling Paperback Books is typically done by tossing them in your recycle bin or donating them to a local organizations such as Goodwill. If the book still has value, you can only sell it on craigslist or half. An alternative is to donate them to Operation Paperback. Since they have been redirecting gently used paperback books and sending them to military members and organizations deployed all over the world. This organization also needs help in providing for shipping costs. Be sure to read our article on the eco-friendly, green aspects of the Kindle book reader. Recycling Carpet photo credit: Eva Rinaldi Live Music and Celebrity Photographer We have some old carpet that needs recycling, so we decided to research recycling methods. Discarded carpet is one of the top ten waste materials in landfills. When you recycle your old carpet, you are playing an important role in diverting the carpet from the landfill. Jerry Brown signed a new bill, the Carpet Stewardship Bill AB that requires carpet manufacturers to set up or participate in recycling programs. A five cent fee per square yard is charged to consumers buying new carpet to help pay for the recycling program. Be sure to ask your carpet dealer if they recycle old carpet.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

4: Recycling - PDF Free Download

Curbside recycling requires the public to stop and think about the best way to dispose of their batteries. But without clear communications and a commitment by the public to change, these programs may not deliver the ROI to sustain them.

Actually, it was recycling newspapers, pickle jars, and, wait, was that a red plastic sled? A skid steer was shoveling crumbling chunks of the mountain onto a conveyor belt, which pulled the goods inside. The biggest material recovery facility in the state, it sits just north of Bunker Hill Community College, hard against the Interstate 93 northbound lanes, and trucks drop about tons of household- and business-generated recycling here every day. Standing on the catwalk, I felt oddly as if I were in the White Mountains. Or rather a weird, postmodern version of them. Twenty feet below, a river of cardboard flowed by on one conveyor belt. To my right, squashed milk jugs tumbled off another belt into a bin. On my left, a stream of yogurt containers and plastic salad trays bumped by. It was like a hyper-industrial hiking trail surrounded by babbling brooks of diaper boxes and beer cans. Advertisement I had come to this mountain to solve a mystery: Comparably populated cities fare both better and worse: Baltimore is at 27 percent, Seattle, 55 percent. And among bigger cities, nobody comes close to San Francisco, at an impressive 80 percent. Aram Boghosian for The Boston Globe At Casella, cardboard is compressed into bales; paper from single-stream initiatives is notoriously contaminated with trash and other recyclables. Sign Up Thank you for signing up! Both cities have challenging street plans and educated, densely packed populations. But budgets aside, many officials and activists in Boston see San Francisco as the gold standard. Boston now recycles waste in all its public schools and is putting recycling bins into public parks. Advertisement The state, too, seems energized. State legislators interested in keeping plastics out of rapidly filling landfills are discussing an expanded bottle bill and a ban on some bags. Any facility generating more than a ton of food waste a week universities, hospitals, hotels, some high schools will have to compost it, rather than dump it as garbage. But can Boston catch up with San Francisco or even Seattle? If we have a lot of company over the weekend, it gets up to 24 pounds. Advertisement He points out a well-dressed young woman scurrying past with an armload of cardboard. Instead of separating glass, plastics, paper, and cans, residents dump them together into one bin. Neal Klinman, a kindergarten teacher who lives in Brighton with his wife and three kids, loves it. One evening after dinner, he lugs the recycling outside and tips it into a big blue cart on wheels with a satisfying crash. Then he holds up his trash for the week, which fits into two small Target bags. Since then, the amount of recycling collected has shot up from 19, tons in fiscal to 32, tons in Over the same period, garbage collection dropped 11 percent, from , tons to , The city has five contracts with collectors and brokers that use three facilities, depending on the district. This is where things get tricky, because increased collection of recyclables does not necessarily mean increased recycling. About 10 percent of what enters a US waste management facility from single-stream recycling winds up getting thrown away as trash. At the plant, six people using hands and hooks pull non-recyclables off the line before the machines take over. Broken umbrellas, Styrofoam containers, wire hangers, plastic bags: Workers also pull off some recyclables at this point. Rigid plastics kiddie pools, that red sled I saw go into one pit, and big pieces of metal weight-lifting bars, cooking pots into another. Screens filter out cardboard, magnets grab other metals, optical sorters separate different types of plastics air jets shoot milk jugs onto one belt and colored plastic onto another. The results are huge bales of paper, aluminum, and plastic. The company aims for a contamination rate of 1. Usually, more material is lost after a waste management company sells the bales to a plastic, metal, paper, or glass recycler. And single-stream material is generally dirtier, with less usable content than the material that is separated by households and businesses before pickup. According to Susan Collins, president of a research group called the Container Recycling Institute, for every tons of single-stream recyclables collected, only about 75 tons gets made into new products. The rest ends up in landfills or incinerators. Dimino offers some stark numbers. But the yield rate at the end of the process how much of each bale can be made into plastic flake and then into

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

new products “ has dropped from 72 percent to 65 percent. Along with paper in the bales, he saw the lids from tin cans and plastic bottle tops. During collection, much of the glass shatters into tiny pieces. Once in a recycling facility, glass shards are sorted by size and weight “ basically falling through the cracks “ and end up in a mountain of dirty confetti containing broken glass, bottle caps, and shreds of paper. It resembles actual glass as much as Velveeta resembles cheese. According to a study conducted by the nonprofit Container Recycling Institute and published in Resource Recycling magazine, which examined data from a dozen US glass processing facilities, only about 60 percent of single-stream glass can be turned into high-quality products like bottles or fiberglass. Another 19 percent is too small to be sorted “ glass is separated by color for recycling “ useful only for road base or landfill cover. The last 21 percent is trash. By contrast, about 98 percent of deposit glass can be recycled back into glass bottles. Only one company in Massachusetts still buys single-stream glass, Strategic Materials Inc. David Hudson, a vice president at the company, says that in any given truckload, about 20 to 40 percent is residue, mostly paper, that must be discarded. Single-stream recycling is not that. However, China recently enacted Operation Green Fence and is refusing bales containing more than 1. The price of processing is going to increase. But higher processing costs would be passed on to cities. Swett says emerging technology, like better optical sorters and screens, will deliver a cleaner product. About 25 percent of Massachusetts residents live in the municipalities that currently use the system. According to the Massachusetts Department of Environmental Protection, which is pushing to implement pay-as-you-throw across the state, people using the system recycle 15 to 25 percent more and throw away 30 to 45 percent less. In , the city of Boston commissioned a study on pay-as-you-throw. The study, finished in , found that pay-as-you-throw would give Boston a 20 to 30 percent reduction in waste and a 10 to 20 percent increase in recycling, with a huge cost savings. Despite these advantages, the city shelved the idea. Refuse collection in Boston has traditionally been a public service, paid for by property taxes. In San Francisco, citizens have paid for collection since , so pay-as-you-throw saved a lot of people money. So why not pay just for what you generate? One reason his family tosses out only two small bags of garbage each week is their kitchen compost, collected in two huge Marshmallow Fluff tubs that Klinman brought home from school. Food scraps make up That is going to have to change, however, when the commercial food-waste ban goes into effect in summer Bacteria gobble the sludge and produce methane, which is used to help power the facility. The plant pipes the treated water 9 miles offshore and sells the solid byproduct to be made into fertilizer. Food scraps ground up in household garbage disposers already end up at Deer Island, but the facility is not at capacity. Currently, the plant produces about 25 percent of its own power, but with additional tons of food scraps mixed into the sludge every day, and some additional upgrades, it could generate about 50 percent. In , Deer Island will begin a pilot program, accepting 50 tons of food waste each day. The biggest hurdle is how to get it there. The plant sits on a spit of land jutting into Boston Harbor, at the end of a narrow road through Winthrop. Most likely, the food waste will be ground into a slurry onshore, then shipped to Deer Island by barge. The city of Cambridge, which already collects compost at more than half of its public schools, one senior center, and three drop-off locations, will begin a curbside pilot program in April , and Boston is watching closely. If citizens play ball and Cambridge can reliably and cost-effectively gather 2 tons of compostable food scraps a week, the program could spread citywide, and also be a model for Boston. Maybe, she says, the best way to increase recycling is to move beyond recycling. I heard the same sentiment echoed again and again. The egg was singing “ an otherworldly high-pitched note generated by the whirling corkscrew inside. I climbed a small step and looked out the window, across the blue harbor to the shimmering Boston skyline. I imagined barges of food scraps lumbering across the water and microbes in the eggs converting coffee grounds into energy. Otherwise, why would we embrace a city with such crummy weather and impossible parking? San Francisco, here we come. Barbara Moran is a science writer in Brookline. Send comments to magazine globe.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

5: CVWMA | Central Virginia Waste Management Authority

At least once a day, Monroe County's recycling plant shuts down to clean up plastic bags that people mistakenly place in their curbside bins. Erica Bryant Change is likely.

Comments Compost bin at a drop-off location. NYC now has an expanding curbside organics collection program, too. Ryan Kuonen via Flickr Knowing that people in our own city are hungry and that children go to sleep without enough to eat is a moral outrage in a place as rich as this. There are many groups working to recover and distribute food so some of what we discard goes to feed people, but inevitably, we will be adding food to our waste stream. The question then becomes: How do we turn food waste from garbage into a resource? One way is composting. According to Emily S. Rueb of the New York Times: In addition, dozens of private companies put trucks on the road to take away refuse from office buildings and businesses. The largest single portion of the trash heap is organics, or things that were once living. That apple core, that untouched macaroni salad, that slice of pizza and the greasy paper plate it was served on are heavy with moisture, which makes shipping expensive. As they decompose, they release methane, a greenhouse gas. At community composting sites, residents can bring organics, food scraps, and yard waste that are turned into fertilized soil. In addition to expanding community composting, the City planned on starting industrial composting at the Hunts Point Food Distribution Center. At the end of the Bloomberg administration and continuing seamlessly into the de Blasio years, the city expanded its efforts to increase organics collection through grants to start community composting projects and expansion of organics collection at greenmarkets. In May of , there was a pilot composting project at 68 schools, and by , the school composting program was in schools across all five boroughs. Curbside collection started in May of in Staten Island. The curbside organics collection pilot program is no longer an experiment and is expanding into Manhattan and parts of the Bronx. Eventually, the city hopes that all community board districts will have curbside collection. Even those without curbside collection can drop off their organics at drop off sites. These drop off and community composting sites accounted for 1, tons being diverted last year. The city has been encouraging composting in some new and creative ways. In , New York City began providing compostable plates, forks and spoons at schools. While not all schools have access to composting, as the program expands the schools will be able to compost these materials. During the switch, schools also eliminated all Styrofoam. Once all the residential and school food waste is collected by the Department of Sanitation, it is sent to a transfer station where machines sort out all the contamination. It is then sent to one of six places. Four of the places are traditional composting sites which are operated by contractors: Compost collected on Staten Island goes directly to the facility there where it is composted on-site. At this treatment plant, the food is combined with traditional sludge from the wastewater treatment process in order to be digested and to create methane. About 40 percent of the methane produced is used to run the plant, and the remaining methane produced is currently being burned off. However, Newtown Creek Plant is partnering with National Grid in order to process the extra methane into biogas that can be used in pipelines for both businesses and residents. The plant processes about tons of food waste a day but has the capacity to process tons per day. The acre property is about 60 miles east of Manhattan. As of , American Organic Energy received 23, tons of food waste from Manhattan each year. While the company currently composts food waste, they are building an anaerobic digester that will convert the food waste into biogas and fertilizer. Through this expansion, American Organic Energy could process 1, tons of food waste a day. That is the future of effective food waste management. This technology closes the loop from food production to consumption and back to production as it creates soil that is fertile enough to grow food. There, workers pile the waste in linear heaps called windrows, mix it with leaves and grass clippings and let oxygen-dependent microbes transform the gunk into lovely dark fertilizer. But the more material you compost, the more space you need to process it. It can get a little smelly, too, which is yet another reason New York City, which generates about one million tons of organic waste a year, will probably never host giant compost farms.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

But anaerobic digestion, in which food is broken down by microbes inside tall, airtight silos, has a real shot at scaling near densely populated areas. The footprint of such plants is relatively small, and their odors are mechanically contained, if they are operated properly. Digesters do cost more to build and run than compost sites, but they more than make up for that by generating two separate revenue streams: In New York City, it seems that we are at the point where the cost of a food waste processing plant is worth the investment. While it does not have the benefit of directly feeding hungry people, it could lower the cost and environmental impact of fertilizer, possibly lowering some food costs. More importantly, it is a living, breathing and practical example of the circular economy and yet another way to move away from our throw-away culture. Progress may be slow, but I see more success than failure.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

6: Using the Food We Waste in New York City

The Administration has been diligently researching options for trash and recycling after witnessing many communities slammed with significant price increases in Many cities bid contracts out, only to receive a sole bid, resulting in much higher than acceptable increases for service.

Today many scientists and others have concluded that recycling does have significant environmental benefits and social value, and the practice has gone mainstream. According to the federal Environmental Protection Agency, the percentage of discarded materials that are recycled rose from 5 percent 8 million tons in to The number of cities with curbside recycling programs has risen from a handful in in those days even drop-off recycling centers were rare to more than nine thousand today. Seldman cites eight reasons for this success, seven of which are relatively uncontroversial: The eighth reason, however, has been controversial from the beginning and remains one of the most polarizing issues in recycling: Thousands of smaller communities have established or are considering similar programs, despite vocal opposition. Is mandatory recycling a good way to get more people to recycle more waste? And even if it is effective, do governments have the right to force people to spend time and effort cleaning and sorting their own trash? Support for Mandatory Recycling Supporters say mandatory recycling is justified to address urgent environmental problems such as climate change. They argue that not only more metals, paper, and glass but also food and yard waste must be diverted from landfills, where it produces methane, one of the major greenhouse gases. This argument rests on moral grounds: Everyone shares responsibility for environmental pollution, resource depletion, and global warming, so everyone has a moral obligation to work toward solutions. Besides, supporters maintain, waste diversion rates combined recycling, composting, and source reduction have plateaued at 6 Recycling In a recycling plant, a giant claw lifts recyclable materials for processing. There will always be people who respond to the carrot and people who only respond to the stick. The village of Hamburg, New York, enacted a mandatory recycling program in ; the compliance level quickly exceeded 95 percent and has stayed that high ever since. Popular support for mandatory recycling is high, advocates say. A November national poll commissioned by the founders of America Recycles Day reported that more than half of Americans support mandatory household recycling to help reduce global warming. In a recent Californians Against Waste poll, 97 percent of respondents favor mandatory recycling in large office buildings, and so-called Extended Producer Responsibility laws have become a very popular way to force manufacturers of computers and other electronic consumer goods to recycle electronic waste, or e-waste. Opposition to Mandatory Recycling Opponents of mandatory recycling are not buying these arguments. First, they counter, lots of places have achieved recycling rates much higher than 30 percent without mandatory recycling. Sixty-four percent of San Jose, California, households, for example, recycle their refuse through a voluntary city program. Conversely, opponents contend that mandatory recycling is no guarantee that recycling rates will rise. The city has never approached that goal. There is no standardized system of tagging curbside bins to identify both unacceptable garbage in the recyclables and unacceptable recy8 Recycling clables in the garbage, and no standard definition of what must and must not be recycled. Moreover, many communities have had to follow mandatory recycling ordinances with anti-scavenging ordinances to deter unauthorized people from picking up those curbside recyclables to sell to private scrap processors, which only adds more layers of enforcement bureaucracy and cost. Recycling is already more costly than landfilling, opponents argue; mandatory programs could break municipal budgets. Critics also argue that PAYT and other positive incentives are more likely to change human behavior than punishment. Recycling rates in PAYT communities, they point out, average They urge first trying innovative approaches to increase voluntary compliance, such as RecycleBank, a program launched by Columbia University grad student Scott Kaufman in RecycleBank participants are given a recycling bin with a computer chip embedded in it. Finally, many critics of mandatory recycling resent coercion on principle. I will stop recycling if this law goes into effect just to become an eventual test case. Dictators are

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

anathema, no matter which side of the political spectrum they come from. In addition, the volume includes a bibliography, a list of organizations to contact for further information, and other useful appendixes. These many useful features make *Issues That Concern You: Recycling* a valuable resource. Given the growing costs of waste disposal to society, having a greater understanding of the recycling issue is critical. Recycling reduces waste volume, reduces greenhouse gases and pollution, conserves natural resources, and takes less energy than manufacturing goods from virgin raw materials. The author finds one major disadvantage—“recycling is more expensive than other kinds of waste disposal”—but argues that processing recyclables in developing countries, where labor is cheaper and demand for raw material is high, is helping to solve that problem. Since the amount of municipal waste being collected in America has nearly tripled, reaching 10 million tonnes in 2000, so much for the plan to reduce waste per person to 1 kg by 2010. As the volume of waste has increased, so have recycling efforts. In America, only 9% of waste was recycled in 2000. Calculating the Energy and Environmental Savings Even so, when a city introduces a kerbside recycling programme, the sight of all those recycling lorries trundling around can raise doubts about whether the collection and transportation of waste materials requires more energy than it saves. Is recycling worth doing on environmental grounds? Studies that look at the entire life cycle of a particular material can shed light on this question in a particular case, but WRAP decided to take a broader look. It asked the Technical University of Denmark and the Danish Topic Centre on Waste to conduct a review of 55 life-cycle analyses, all of which were selected because of their rigorous methodology. The researchers then looked at more than 100 scenarios, comparing the impact of recycling with that of burying or burning particular types of waste material. Recycling has many other benefits, too. It conserves natural resources. Landfills take up valuable space and emit methane, a potent greenhouse gas; and although incinerators are not as polluting as they once were, they still produce noxious emissions, so people dislike having them around. But perhaps the most valuable benefit of recycling is the saving in energy and the reduction in greenhouse gases and pollution that result when scrap materials are substituted for virgin feedstock. Extracting metals from ore, in particular, is extremely energy-intensive. Savings for other materials are lower but still substantial: Recycling also reduces emissions of pollutants that can cause smog, acid rain and the contamination of waterways. For thousands of years metal items have been recycled by melting and reforming them into new weapons or tools. It is said that the broken pieces of the Colossus of Rhodes, a statue deemed one of the seven wonders of the ancient world, were recycled for scrap. During the industrial revolution, recyclers began to form businesses and later trade associations, dealing in the collection, trade and processing of metals and paper. In the 1930s many people survived the Great Depression by peddling scraps of metal, rags and other items. In those days reuse and recycling were often economic necessities. Recycling also played an important role during the second world war, when scrap metal was turned into weapons. The Benefits of Recycling Outweigh the Costs 15 As industrial societies began to produce ever-growing quantities of garbage, recycling took on a new meaning. Rather than recycling materials for purely economic reasons, communities began to think about how to reduce the waste flow to landfills and incinerators. In Germany made history when it passed an ordinance shifting responsibility for the entire life cycle of packaging to producers. In response, the industry created Duales System Deutschland (DSD), a company that organises a separate waste-management system that exists alongside public rubbish collection. Although the system turned out to be expensive, it has been highly influential. Many European countries later adopted their own recycling initiatives incorporating some degree of producer responsibility. As with all commodities, costs for recyclables fluctuate. Even so, most kerbside recycling programmes are not financially self-sustaining. The cost of collecting, transporting and sorting materials generally exceeds the revenues generated by selling the recyclables, and is also greater than the disposal costs. Exceptions do exist, says Dr Morris, largely near ports in dense urban areas that charge high fees for landfill disposal and enjoy good market conditions for the sale of recyclables. For many materials the process of turning them back into useful raw materials is straightforward: Metals and glass can be remelted almost indefinitely without any loss in quality, while paper can be recycled up to six times. As it goes through the process, its fibres get shorter and the quality deteriorates. Plastics,

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

which are made from fossil fuels, are somewhat different. Although they have many useful propertiesâ€”they are flexible, lightweight and can be shaped into any formâ€”there are many different types, most of which need to be processed separately. For PET, food-grade bottle-to-bottle recycling exists. Even so, plastics are being used more and more, not just for packaging, but also in consumer goods such as cars, televisions and personal computers. Because such products are made of a variety of materials and can contain multiple types of plastic, metals some of them toxic, and glass, they are especially difficult and expensive to dismantle and recycle. But in America only a handful of states have passed such legislation. That has caused problems for companies that specialise in recycling plastics from complex waste streams and depend on takeback laws for getting the necessary feedstock. Michael Biddle, the boss of MBA Polymers, says the lack of such laws is one of the reasons why his company operates only a pilot plant in America and has its main facilities in China and Austria. Much recyclable material can be processed locally, but ever more is being shipped to developing nations, especially China. The Benefits of Recycling Outweigh the Costs 17 The country has a large appetite for raw materials and that includes scrap metals, waste paper and plastics, all of which can be cheaper than virgin materials. In most cases, these waste materials are recycled into consumer goods or packaging and returned to Europe and America via container ships. With its hunger for resources and the availability of cheap labour, China has become the largest importer of recyclable materials in the world. Especially in Britain, politicians have voiced the concern that some of those exports may end up in landfills. According to Pieter van Beukering, an economist who has studied the trade of waste paper to India and waste plastics to China: He has witnessed as much in India, he says, where dozens of inefficient, polluting paper mills near Mumbai were transformed into a smaller number of far more productive and environmentally friendly factories within a few years. Still, compared with Western countries, factories in developing nations may be less tightly regulated, and the recycling industry is no exception. They dismantle and recycle anything from plastic to electronic waste without any protection for themselves or the environment. Far less controversial is the recycling of glassâ€”except, that is, in places where there is no market for it. Britain, for example, is struggling with a mountain of green glass. It is the largest importer of wine in the world, bringing in more than 1 billion litres every 18 Recycling year, much of it in green glass bottles. But with only a tiny wine industry of its own, there is little demand for the resulting glass. Instead what is needed is clear glass, which is turned into bottles for spirits, and often exported to other countries. So some of the surplus glass is down-cycled into construction aggregates or sand for filtration systems. Instead of being bottled at source, some wine is now imported in 24-litre containers and then bottled in Britain. This may dismay some wine connoisseurs, but it solves two problems, says Mr Dawe:

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

7: Residential Trash Removal & Recycling services | Advanced Disposal

As an example, we do zero waste in our city hall so police do not have a trash can at their desk, they only have a recycling container, but they didn't know that their Starbucks cup itself is compostable so it goes in the green [bin], the plastic lid is recyclable so it goes in the blue, but the straw is neither and it goes into the waste.

Many thought that if New York had to make severe cuts in its solid waste programs, other municipalities were sure to follow. In fact, with the recent economic downturn, many major cities have had to deal with solid waste budget cuts. In most cases, cities are protecting the core aspects of their operations, such as picking up and disposing of garbage. Services considered to have secondary importance – recycling or special waste pick-ups – often are at risk. Other municipal solid waste departments have been somewhat insulated from the ups and downs of the economy. Either they are supported by dedicated funds, or they have locked into long-term disposal and recycling contracts. Many cities and counties are simply finding ways to do more with less. The most stable waste departments are those that are not beholden to a general budget. So some facilities have seen increases [in their revenues]. With the recycling markets being soft, they have a difficult time taking the long-term approach. Los Angeles, for example, is in a hiring freeze, which affects all departments, including sanitation. Other cities are looking to cut or trim their recycling programs. In Virginia, the Chesapeake-based Southeastern Public Service Authority currently is considering a major overhaul of the curbside recycling programs in several municipalities in the Virginia Beach area, including Norfolk, Portsmouth and Suffolk. Denver and Dallas have recently considered curbing recycling as well. Other major cities are looking for alternatives to cutting recycling. In Atlanta, budget cuts have been so severe that Mayor Shirley Franklin has taken to enlisting businesses and volunteers for help in city clean-ups. Although it is supported by an enterprise fund, the Minneapolis Department of Public Works has had its share of cost increases – primarily insurance, union pay raises, and truck and fuel costs. In light of budgetary concerns, Young is concerned that large, vertically integrated companies – those that collect, process, transport and dispose of waste including recycling – which also operate and benefit from landfilling trash, may selectively collect the most marketable commodities for recycling and dispose of the rest. The department also is not replacing equipment as often as it would like, and it had to close one of its four neighborhood depositories, where residents can drop off their heavy waste materials. Yet the city has made an effort to continue its normal waste collection and curbside recycling programs. They work hand in hand. One of the sites collects household hazardous wastes such as oil and paint. Big city slickers Other major urban solid waste departments have not been affected by the downturn in the economy. Palm Beach County, Fla. It helps that this is an affluent area with few factories, whose budgets and workforces have proven to be more susceptible to downturns in the economy. We have a lot of tourism [which drives] the economy. We have very little manufacturing. Once the homes have the containers, household participation in recycling, as well as actual tonnage, should rise in unison. San Francisco also has been relatively unaffected by the economic downturn. The new recycling program has reached approximately , San Francisco houses and 7, apartment buildings, nearly doubling the recycling tonnage collected on those routes. The city has two things going for it: If households reduce their garbage can size to 20 gallons from 32 gallons, they can pay a lower collection fee. In fact, waste revenues last year were 10 percent higher than expected. Furthermore, the city maintains a recycling rate of 30 percent, all through drop-off centers. Yoos says that the city has focused solely on the most marketable commodities – in this case newspaper, cardboard and yard waste. The state does not have curbside collection. Cities save on labor costs, because residents separate their recyclables. Give me shelter Clifton, N. It is only in the second year of a five-year garbage contract, although its recycling contract expires in October. The city does that by encouraging residents to reduce and reuse in their own kitchens and backyards, by collecting and composting their organic waste. Secondly, the city encourages manufacturers to package items in only the most marketable materials. That lets the city spend less time, energy and money

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

collecting plastics that are not as likely to be marketable and are eventually hauled to the landfill. Lastly, DuBois is a strong advocate of New Jersey instituting a bottle bill — a deposit system requiring a refundable fee on every can or bottled drink. Right now, the city relies on residents to source-separate their glass, and the city has the space to store glass that is not moving on the market. But if the city changed to commingled collection, it would be more difficult to keep costs down, DuBois says. In northern California, the Sacramento-based California Integrated Waste Management Board recently approved a reduction in the mandatory diversion goal for certain rural areas because of the economy. For example, Modoc County and the town of Alturas, both in rural California, have suffered from a stagnant economy, a high unemployment rate, budget constraints and a hefty distance to major markets that purchase recyclable materials. In the end, the municipalities most likely to save money on solid waste services are those that get residents actively involved, either by moving their own recyclables or by paying extra for disposal.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

8: Why most Americans find recycling confusing | Waste Dive

Both the county and city of Sacramento are considering plans to have staff flag errant recycling habits and possibly penalize those who sully their recycling bins with trash.

Steel and Tinplate Co-mingled recyclables- can be sorted by a clean materials recovery facility In Somerville, MA all accepted paper, glass, plastic, and metal recycling is picked up from a single bin Kerbside collection of recyclable resources is aimed to recover purer waste streams with higher market value than by other collection methods. If the household incorrectly separates the recyclable elements, the load may have to be put to landfill if it is deemed to be contaminated. Kerbside collection is commonly considered to be completely environmentally friendly. This may not necessarily be the case as it leads to an increased number of waste collection vehicles on the road, in themselves contributing to global warming through exhaust emissions[citation needed] until the time of their conversion to clean energy. New and emerging waste treatment technologies such as mechanical biological treatment may offer an alternative to kerbside collection through automated separation of waste in recycling factories. Recycling in Australia Residential kerbside collection is carried out by local governments, with some exceptions, e. Available services and details vary from council to council. Councils generally provide residents with wheelie bins for Kerbside collection of normal waste which is collected weekly or fortnightly. They also may have less frequent kerbside collection of bulkier waste. Councils provide their residents with two or three wheelie bins, depending on the council, with some councils having different options for different properties. The two bin system consists of a recycling bin usually litre for co-mingled recyclables, and a general waste bin which is often smaller e. The three bin system consists of the above two bins plus a green waste bin usually litre. Not all councils have a green waste bin collection service. Many councils provide the option of larger bins, smaller bins, or additional bins. A wide variety of hard plastics, glass bottles and jars, steel cans, aluminium cans, paper and cardboard can be placed into the recycling bin. The green waste bin can be used for garden organics e. The council may turn the green waste into mulch garden waste collection only or compost and extract energy food organics and garden organics. Most councils follow a standard colour scheme for their wheelie bins, specified in Australian standard AS According to the standard, general waste bins have a red lid, recycling bins have a yellow lid, green waste bins have a lime green lid, and all these bins have a dark green or black body [4]. Not all councils follow this colour scheme. For example, recycle bins in some councils have a blue body and yellow lid. Bins are emptied according to one of several patterns. Generally speaking, general waste bins are emptied weekly while recycling bins and green waste bins are emptied fortnightly on alternate weeks. Many councils who have introduced food scrap recycling have switched to emptying green waste bins weekly and general waste bins and recycling bins fortnightly on alternate weeks. Some councils empty recycling bins weekly, while others do so only during a certain period like the Christmas and summer holiday period, switching to fortnightly at other times. Recycling bins are provided at no additional cost, while the general waste bin is either at no additional cost or at an annual cost. The green waste bin, where available, is either provided to all residents, or available as an option to residents, either at an additional annual cost, or a one-off cost, or at no additional cost, depending on the council. Some councils limit the availability of green waste bins e. Many councils provide the option of larger bins than the standard ones provided even larger than litres in some cases or additional bins at additional annual cost. Some provide the option of a smaller general waste bin at a reduced cost. Councils also have kerbside collection of bulky waste. There may be different kinds of collection, e. Large branches E-waste e. TVs, computers which the council may recycle Hard rubbish anything else too bulky for the wheelie bin For bulky waste, residents are asked to place items directly on the kerbside. There may be other rules, e. Collections may occur once or a few times a year on specific dates or date ranges, or on demand with a limit to the number of times per year, depending on the council. Based on the green cart , it requires residents to self-sort refuse and place different types at the kerb on alternating weeks. As shown in the photo at

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

left, week 1 would see the green cart and optional orange bags used for kitchen waste and other organics such as yard waste. Week 2 would permit non-recoverable waste in garbage bags or cans. Blue bags are used for paper, plastic and metal containers. Together with used grocery bags containing newspapers, they may be placed on the kerb either week. In summer, the green cart is emptied weekly due to the prevalence of flies. HRM has achieved a diversion rate of approximately 60 percent by this method. Calgary, Alberta has adopted "Curbside" Recycling and uses blue bins. The blue cart programme accepts all types of recyclables, including plastics. This programme is mandatory. Due to the success of the project the City of Kitchener put out a contract for public bid in for a recycling system citywide. Laidlaw won the bid and continued with the popular blue box recycling system. Today hundreds of cities around the world use the blue box system or a similar variation. The yellow-lidded wheelie bin is for non-glass recyclables, and the blue bin is for glass. The two bins are collected on alternating weeks. Official council bags are used for general household waste, and are collected weekly. In New Zealand, kerbside collection of general refuse and recycling, and in some areas organic waste, is the responsibility of the local city or district council, or private contractors. Practices and collection methods vary widely from council to council and company to company. Some examples of collection are: Two litre wheelie bins are supplied: Three wheelie bins are supplied: The organic waste bins are collected weekly, while the recyclables and general refuse bins are collected on alternating weeks. A litre bin is supplied for recyclables, collected weekly. General refuse is collected weekly using user-pays official council bags. Two bins are supplied: These two bins are collected on alternating weeks. There is no council collection of general waste, and all general waste collection is carried out by independent companies. General refuse is collected weekly using user-pays system of orange tags - one orange tag is to be placed on a standard rubbish bag up to 60 litres capacity, or half an orange sticker can be placed on two supermarket bags tied together. Recycling is to be placed in plastic bags, with paper and cardboard collected in the first week, and plastic, metal and glass in the second week. A litre wheelie bin is provided for recyclables, collected fortnightly. In New Plymouth, Wanganui and Upper Hutt recyclable material was collected if placed in suitable bags. Christchurch City Council is introducing the system to their kerbside collection. Other councils are carrying out trials. Some find the colour differences confusing, and some people want a national scheme. Bury uses blue for cans, plastic and glass, green for paper and cardboard and brown for garden waste. Salford uses blue for paper and card, brown for cans plastic and glass and pink for garden waste. Most councils use grey or black for general waste, with a few exceptions such as Liverpool, which uses purple for general waste, a colour used by no other council. Another controversial issue in the UK is the frequency of the waste collections. To save money, many councils are cutting the frequency of both general waste and recyclables collections. This has led to problems from larger households, and has led to an increase of overflowing and fly tipping. For example, previously, Bury Council collected general waste once a week and recyclables fortnightly. This has now changed to fortnightly for general waste and monthly every 4 weeks collection of recyclables. A few councils are using "forced" recycling, by replacing the large, litre general waste bin with a smaller litre or litre bin, and using the old litre one for recyclables. This may be made worse by fortnightly collections of the "small" bin, and strict rules such as "No extra bags will be taken" and "Bin lids must be fully closed". Their recycling rates have risen substantially as a result, but there are usually complaints from householders. Trafford Council also use a similar scheme, but the small grey bin is emptied every week. In addition, the two named councils, and more, collect food waste together with garden waste, by sending out kitchen caddies and compostable liners. The food and garden waste is usually collected weekly or fortnightly, and is taken to an In Vessel composter or Anaerobic digester, where the waste is turned into soil improver for use on local farms. Again some of the paper will be sent further afield. Some councils only have 3 bins, i. This means that plastics, cans and glass go in the same container as paper and cardboard. Although this is much easier for the residents, there is more sorting required, and the paper quality is sometimes of a low grade due to food contamination or shards of glass in the paper, and so this scheme has been criticised. Also, most councils require residents to remove caps from bottles and rinse them out to avoid smells. In fact many

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

bottlers, especially bottled water companies, have now designed their bottles to be collapsible; though this message has not been effectively disseminated to the consumer. Labels are rarely required to be removed, however. This also means that only plastic bottles are recycled. Councils are still trying to make clear that plastic tubs yogurts, desserts and spreads , bags and cling film cannot be recycled through the kerbside economically. If too much contamination is collected then this results in the whole vehicle load going to landfill at a high cost. Councils that use many bags and boxes Edinburgh suffer from less contamination but are complicated and the loose paper and cardboard, and recycling bags are blown around, and paper can be wet. The "atez-ate" system consists in hanging each kind of rubbish in a hanger outside the house a certain day or days in a week. For example, in Hernani, they have three days to hang their organic rubbish, two days for plastics and metallics, one for paper and one for rejects residuals. This system started in the town of Usurbil in the year , due to the incinerator of the region of Gipuzkoa which was going to be built in this town, exactly in the neighborhood of Zubieta. Three years after, the construction of the incinerator was stopped by the government of the region, suggesting that the incinerator was a source of contamination and the high cost of the building.

9: Kerbside collection - Wikipedia

The state's solid waste authority simply has not been able to distribute recycling bins to all the new housing in the area yet, Pellowitz says. Once the homes have the containers, household participation in recycling, as well as actual tonnage, should rise in unison.

CURBSIDE RECYCLING INCREASES WHEN PEOPLE DO NOT HAVE TO SORT THEIR TRASH SUSAN KINSELLA pdf

The history of Ridgefield, Connecticut Myers on Evidence in Child, Domestic, and Elder Abuse Cases lit jee advanced 2015 question paper 1 with solutions Statistical Package for the Social Sciences (The SPSS series in data analysis) Children Immigration The golden jubilee of the Association of military surgeons of the United States Management of pleural effusion The Natural System of Political Economy 1837 The rise of the novel of manners Pet Shop Boys special. The Asia-Pacific rim 54 Mallow 90 Index of Illustrations Substance Abuse Assessment and Diagnosis Sing spell and write Membrane Mimetic Chemistry Saving My Assassin Elementary statistics brief 6th edition The ECOWAS : history and achievements V20 location for ed American thought and religious typology. The Life and Times of a Nic 17.2 Eliminative materialism and scientific realism Convex hulls of random processes Ya. G. Sinai Red Hawks account of Custers last battle Digital Terrestrial Television in Europe Maharajas palaces Staceys Emergency Riverrun Jacques Aubert Oh No! the Television Wont Work! Reflecting on tradition: Jewish diversity Expressive Language Remediation for the Older Elementary Child Puppets, masks, and performing objects at the end of the century John Bell California by William T. Vollmann The patient speaks of her mother The use of stereographic projection in structural geology World at war magazine Managing Human Resources in South African Schools (Managing Schools in South Africa Series) Michelangelo dreams High performance fillers 2005 The Fellowship of the Ring Sourcebook (The Lord of the Rings Roleplaying Game)