



## Waste Resources

## Local Solid Waste Diversion Mandate - (State)

**Issue:** California has adopted a Statewide 75% waste recycling goal for the year 2020 (AB 341). AB 341 included language saying the State “shall not establish or enforce a diversion rate on a city or county that is greater than the 50 percent diversion rate established pursuant to Section 41780” (from Section 41780.01 (b) of the Public Resources Code). Local jurisdictions are concerned that the 75% statewide recycling goal might one day be a mandate for them before they are capable of complying with it.

**Action:** Support legislation that keeps the local diversion mandate of 50% in place until the recycling and composting infrastructure is more developed, additional tools are available to local governments to increase diversion, including recycling options (i.e. compost facilities, material recovery facilities, anaerobic digestion facilities, etc.), and the additional markets necessary to utilize the reclaimed resources are in place.

**Background:** Local jurisdictions in California are currently mandated to divert 50% of all solid waste from disposal in landfills. The language in Section 41780.01 (a) of the PRC regarding the 75% recycling goal reads as follows: “The Legislature hereby declares that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter.” It is believed that forcing the diversion of solid waste that is “source reduced, recycled or composted” by an arbitrary deadline does not allow time for sustainable solutions to be developed. Additionally, foreclosing on the utilization of any diversion opportunities that might develop elsewhere, such as with conversion technologies, is short-sighted. Diverse strategies are needed to create additional tools for increased diversion and market development.

The local diversion mandate of 50% should remain in place until the recycling and composting infrastructure is more developed, additional tools are available to local governments to increase diversion, including recycling options (i.e. conversion technologies), and the additional markets necessary to utilize the reclaimed resources are in place.

## Extended Producer Responsibility (EPR) - (State)

**Issue:** Extended Producer Responsibility (EPR) – Requires producers of goods that contain materials requiring special handling (i.e. mercury, etc.), and are harmful to the environment, to be accountable for products during their lifespan (from “cradle to the grave”).

**Action:** Support legislation that places responsibility for product design, distribution for sale, and collection for recycling or disposal on the producer of said product and, thereby, relieves local jurisdictions from having to bear the cost of product collection for recycling and disposal programs.

**Background:** The California law that banned the landfill disposal of items commonly referred to as Universal Wastes that are considered harmful to the environment went into effect on February 8, 2006 (CCR, Title 22, Division 4.5, Chapter 23). Universal Wastes include household batteries, fluorescent light bulbs and tubes, thermostats and other items that contain mercury, and electronic devices such as video cassette recorders, microwave ovens, cellular and cordless phones, printers, computers and radios. Since that time, Sharps (needles) have also been banned from landfill disposal.

As a result of these unfunded mandates, local governments have had to develop new programs to handle the disposition of such wastes. The County of Riverside Department of Waste Resources collects and processes these waste items through its hazardous waste collection and landfill load check programs. The two programs cover the entire County and are funded with a combination of landfill fees and grant monies. The use of public monies for the final disposition of these products equates to subsidies in favor of the producers.

Extended Producer Responsibility makes the final handling of such products a cost of doing business for the producer, which more accurately reflects the true cost of the product. The costs are then incorporated into the purchase price and only borne by the user of the product rather than by all rate payers. Local governments (and the rate payer) will no longer have to fund costly programs for this purpose. By placing the life cycle burden on producers, better products are designed, which will reduce the toxicity of products, lessen the amount of packaging, and better plans for final disposition of the product (whether it be recycling or disposal).

The concept of extended producer responsibility has also been applied to other products not in the lists above. For instance, the Governor signed bills from the 2010 legislative session into law that involved Extended Producer Responsibility for paint and carpet. The paint program is already saving the County \$300,000 per year and has increased re-use of paint.

## Development of Conversion Technologies - (State)

**Issue:** Conversion Technologies – Those technologies that process through thermal (without combustion), chemical or biological means the organic portion of municipal solid waste, that remains after recycling, into useable products such as electricity and fuel, and as a result decrease the amount of solid waste disposed in landfills.

**Action:** Support legislation that encourages the development of conversion technologies by removing legislative/regulatory barriers to them and by granting diversion credit on behalf of those jurisdictions that make use of them.

**Background:** The statewide level of recycling and composting in the State of California is estimated to be 65% (for 2009, per California Department of Resources Recycling and Recovery). Still, seventy (70%) to eighty (80%) percent of all refuse landfilled each year is characterized as biomass or organic. This material could be feedstock for a number of different technologies commonly known as conversion technologies: gasification, pyrolysis, anaerobic digestion, hydrolysis, distillation, plasma arc, and fermentation. Such facilities provide additional opportunities to keep recoverable materials out of the landfill.

There have been no conversion facilities developed in the United States. Part of the problem has been government regulations. In California, pyrolysis and distillation are considered forms of “Transformation” (which is considered disposal) and are limited in terms of how much of the processed material can count toward a jurisdiction’s diversion total. Feedstock sent to a transformation facility can count for no more than 10% of a jurisdiction’s 50% requirement. Conversion Technologies are expensive to develop and local governments will need a number of positive factors in their favor to justify their development. Generous credit toward a jurisdiction’s State mandated diversion requirement is one important factor. Conversion technologies do not incinerate the feedstock so they should not be considered transformation facilities.

It is widely accepted by stakeholders that jurisdictions should send feedstock to a conversion facility only after the waste stream has been subjected to recycling and other diversion programs (i.e. curbside recycling, Material Recovery Facility (MRF) processing, and commercial recycling, etc.). Though conversion facilities produce worthwhile products, including some technologies producing energy, the existing infrastructure is seen as getting recyclable materials to higher and more beneficial uses. Conversion technologies can make good use of solid waste materials not appropriate for these other diversion programs.

Numerous conversion technology facilities are in operation in Europe and Japan. There should be more than enough cases to review in making sure the technologies can meet California’s stringent environmental regulations.

## Development of Compost Facilities - (State)

**Issue:** Compost – The product resulting from the controlled biological decomposition of organic material (i.e. grasses, paper, food, etc.), which can enhance soils and decrease the amount of solid waste disposed in landfills.

**Action:** Support legislation that encourages the development of, and/or removes barriers to, compost facilities so jurisdictions have additional outlets (other than disposal) for organic materials and have an additional tool to increase their diversion rate.

**Background:** A 2010 California Department of Resources Recycling and Recovery (CalRecycle) assessment of the State's Compost and Mulch-Producing infrastructure estimated that 9.3 million tons of compostable materials were processed into an estimated 13 million cubic yards of products in 2008. Even so, it is believed that approximately 30% of all materials disposed of annually in California landfills can be processed into compost or mulch.

Composting as an industry, and a waste management process, is not using more of the compostable material available because of the difficulty in establishing markets and the sometimes constraining impact of government regulations. Regulations can impair the use of additional compostable material at processing facilities. For instance, current regulations call for green material to have no more than 1.0% contaminants by weight. Material collected in curbside collection programs often times have a higher level of contaminants when delivered to facilities. Regulations can be changed to increase the level of contamination permissible in green waste received at processing sites and add a maximum contamination level for material leaving compost sites. The contaminant level for material leaving a facility would have to be consistent with standards for determining when it can be used, where it can be used, or when it is to be disposed. Another regulation related issue is that rules of multiple agencies can be redundant and/or inconsistent and cause uncertainty on the part of prospective operators. Efforts to clear up conflicting requirements among regulatory agencies can assist in the development of compost facilities and the industry.

Composting is very important to local communities. It is beneficial to the environment because it replenishes soils with needed nutrients. The amount of compostable material still available for processing underscores the importance of the industry in helping jurisdictions meet, and maintain, the required diversion level of 50%. Legislation that helps develop compost markets, eliminates barriers/obstacles to the industry, and enhances jurisdictions' ability to achieve/maintain a 50% diversion level must be supported by Riverside County.

## Tire Issues

**Issue:** Tire abatement and recycling – Senate bill 876 (Escutia, 2000) directed CalRecycle to submit a five-year-plan to the legislature for management of waste and used tires. The seventh edition of the five-year-plan was adopted in 2013 which covers through 2017/18. A draft plan has been written to cover years up to 2019/20.

**Action:** Support legislation to assist local governments in ensuring used tires are properly disposed.

**Background:** The state has a tire recycling goal of 75%; however the rate has hovered around 40%. This is mainly due to a lack of a secondary market for used tires, therefore many tires end up being exported to other countries, placed in tire landfills or illegally dumped. The aim of the new draft plan is to implement an expanded incentive program that provides payments for desired end-uses of tires. This would entail differential incentive payment rates, with higher payments for preferred end-uses such as incorporation of crumb rubber into rubberized asphalt concrete; moderate payments for end-uses such as use of tire-derived aggregate in retaining walls; and lower payment rates for less-preferred (but still non-disposal) uses such as energy recovery (which, while not recycling, still allows for capture of the energy content in tires). This approach focuses on creating demand by assisting manufacturers in covering the costs of marketing their products against competing non-recycled products; it is modeled after similar incentive programs such as for plastic market development.