California’s New Recycling Goal is a Green Jobs Creator

ACHIEVING 75 PERCENT RECYCLING IN CALIFORNIA COULD PRODUCE MORE THAN 110,000 JOBS

California already leads the nation in green jobs creation, and increasing recycling and the industry that supports it will create even more jobs. In 2011, Governor Jerry Brown signed Assembly Bill 341, which set a goal that “75 percent of solid waste generated be source reduced, recycled or composted by 2020.” NRDC recently commissioned Tellus Institute to assess the job creation potential of meeting the 75 percent recycling goal, and the results reported in a new publication called From Waste to Jobs: What Achieving 75 Percent Recycling Means for California projected job growth in recycling jobs, thousands of processing jobs, and likely tens of thousands of indirect jobs that would result from achieving the recycling goal. In order to realize the economic benefits of increasing recycling, California must enact policies and incentives to retain more of those recovered materials in state for processing and use in manufacturing.

Just half of California’s waste is currently reduced, recycled or composted. The rest winds up in landfills or is incinerated, and the amount of total waste in the state is steadily increasing. In 2010, California’s waste stream was 72.8 million tons. Taking into consideration the state’s projected population increase and waste per resident, the California Department of Resources Recycling and Recovery (CalRecycle) estimates that by 2020 the state will produce 80 million tons of waste annually.

To redirect such a large portion of California’s waste, we have to look at what flows into and out of trash cans across the state. Although California has some of the highest recycling rates in the country, recyclable materials like paper and plastic are still landing in trash cans by the ton. In fact, when CalRecycle sampled its waste stream looking for commonly recoverable paper, plastics and metal materials, the agency found that 63 percent of these perfectly recyclable materials were clean enough to be recycled by the time they arrived at disposal facilities.

Another wasted opportunity is compostable organic material. A 2008 study showed that about 50 percent of California’s overall waste consisted of organic materials like food, paper and yard clippings. Although much of this waste stream is readily compostable, the infrastructure to process and market compostable materials is limited and underdeveloped.
For its study, Tellus used the national job production factors established for its 2011 report, “More Jobs, Less Pollution: Growing the Recycling Economy in the U.S.” to estimate economic activity and job creation through recycling and composting, and applied these to California-specific data on waste generation. Based upon these methods, Tellus derived estimates of jobs produced per 1,000 tons of each material managed by waste facilities along each phase of the waste stream.

Tellus found that job estimates vary considerably by material and management method (e.g. collection, manufacturing). Plastic and aluminum recycling bear the highest potential for new job creation because the processes are more labor intensive. Recycling 75 percent of plastic (which amounts to an additional 2.12 million tons) would create 29,000 jobs; this surpasses job creation related to any other material.

Relying upon conservative assumptions and compiling data to cover all waste sources and the number of jobs created over each sector, Tellus found recycling an additional 23 million tons of discarded material per year by 2020 has the potential to create at least 110,000 additional recycling related jobs. Thirty-one percent of these jobs are estimated to be in materials collection, 24 percent in materials processing and 45 percent in manufacturing using recovered materials. These figures do not include estimates for additional jobs created in the agricultural sector from recycling or composting the 7.53 million tons of organic material required to meet the 2020 goal.

These figures also do not take into consideration indirect jobs in sectors that will provide equipment and services to recycling-related businesses or induced jobs from the additional spending by the new employees. By applying a model developed by the Environmental Standards Branch of the British Columbia Ministry of Environment, Tellus found that the 110,000 direct jobs created in California would result in an additional 38,600 indirect and induced jobs.

Retaining the job growth spurred by this ambitious but necessary change in waste management will require California’s infrastructure to grow to collect and process those materials, and use them in in-state manufacturing facilities. According to CalRecycle, in 2012, almost 20 million tons of recycled materials were exported by sea from California’s ports, though it is unclear exactly how much of that waste originated in California. Much of the higher-level processing of bulk or baled materials, such as paper, plastic, and metals, has been taking place in China and South Asia. New recycling standards give California a moment of opportunity—one in which development of new processing and manufacturing facilities will allow the state to reap the economic benefits of the program, just as it offers direct environmental benefits to California’s cities, streams, forests, and aquatic ecosystems.