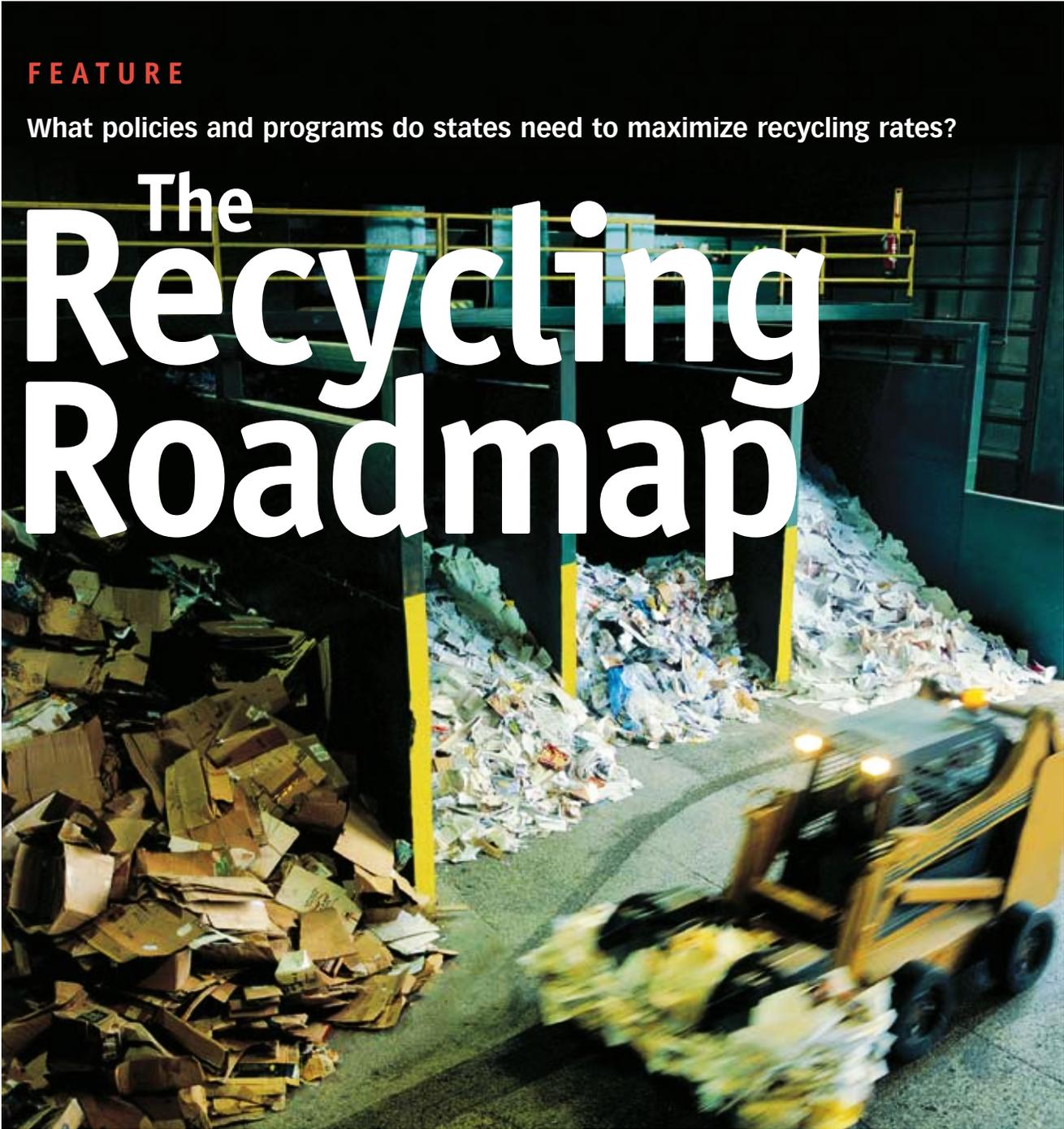


## FEATURE

What policies and programs do states need to maximize recycling rates?

# The Recycling Roadmap



BY **Robin Mitchell**

**R**ecycling has developed far beyond the days of people simply taking newspapers, bottles and cans to the local drop-off center. Zero waste, once an obscure concept, is now a regular part of the discussions about waste management in an increasing number of jurisdictions. And communities are incorporating sustainability into evaluation criteria when selecting vendors and developing programs.

In 2008, Florida joined the growing number of states seeking to increase landfill diversion when it established a goal of a 75 percent recycling rate by 2020 (the state's rate is currently 28 percent). Legislation enacted this year establishes a Recycling Business Assistance Center, and requires construction and demolition debris to be processed prior to disposal. However, it remains to be seen whether the new law provides the policies and funding necessary for Florida to reach its target.

To identify how a state can be successful in such efforts, Tampa, Fla.-based Kessler Consulting Inc. (KCI) set out to answer this question: What state-level policies and programs are needed to maximize recycling? KCI reviewed numerous state recycling programs and their progress. Special focus was given

to eight states that reportedly have achieved diversion rates of 40 percent or higher: California, Maryland, Massachusetts, Minnesota, North Carolina, Oregon, Washington and Wisconsin.

KCI identified 10 key elements that contributed to the states' success (see Figure 1). All of these elements are not necessary to maximize recycling, but each of the eight high-performing states capitalized on several of these factors.

This article covers the first five key elements, which are policy-related. The remaining five elements will be discussed in a future article.

### Goals and Plans

Granted, there are almost as many ways to count recycling rates as there are states, but meaningful goals and long-term strategic plans to achieve them are the foundation of the country's most successful recycling programs.

Some states apply their goals to just municipal solid waste, while some count all solid waste, including industrial and agricultural scrap. Several states (e.g. Maryland, Minnesota and Oregon) allow local governments to calculate source reduction credits toward their rates. A few states (e.g. California) count fines from construction and demolition debris or ground-up yard waste used for alternative daily landfill cover as recycling. Florida took an especially controversial leap — one that has been criticized for being inconsistent with the nationally accepted waste management hierarchy — by counting renewable energy (e.g. waste-to-energy and possibly landfill gas recovery) as recycling.

Merely establishing a goal does not ensure success. It needs to be backed by programs and policies that incentivize action and help establish the necessary infrastructure and markets. States with the most successful recycling programs typically develop state-level strategic plans and also require some form of local government planning. Local government plans should not merely be obligatory reporting exercises, but should be dynamic plans that are reviewed and revised over time to reflect progress and advancements in recycling methods and technologies.

Furthermore, local governments should face consequences for not achieving established goals or maintaining plans. For example, some states have the ability to withhold grant funding to local governments or to condition solid waste facility permits on achieving state goals.

### Disposal Bans

Disposal bans are placed primarily on wastes that could potentially release toxic substances into the environment (e.g. batteries, mercury-containing products and electronics) or that are difficult to dispose of (e.g. tires and white goods). Several states have taken disposal bans a step further and use them to support or stimulate markets for recyclable or compostable materials, such as yard waste, paper, metal, glass and plastic containers (see Figure 2).

Enacting a "ban without a plan" should be avoided. Suf-

FIGURE 1

#### THE 10 KEY DRIVERS OF SUCCESSFUL RECYCLING

- Goals and Plans
- Disposal Bans
- Bottle Bills
- Product Stewardship
- Political Champion
- Construction and Demolition Debris Recycling
- Organics Recovery
- Technical Assistance
- Marketing Development
- Funding

FIGURE 2

#### EXAMPLES OF STATEWIDE DISPOSAL BANS ON COMMON RECYCLABLES

State	Banned Materials
Massachusetts	<ul style="list-style-type: none"> <li>• Aluminum, metal and glass containers</li> <li>• Single polymer plastics, recyclable paper</li> <li>• Asphalt pavement, brick, concrete, metal and wood</li> </ul>
Michigan	<ul style="list-style-type: none"> <li>• Beverage containers 1 gallon or smaller</li> </ul>
Minnesota	<ul style="list-style-type: none"> <li>• Telephone directories</li> </ul>
North Carolina	<ul style="list-style-type: none"> <li>• Aluminum cans</li> <li>• Beverage containers consumed on premises of ABC permit holders</li> <li>• Plastic bottles, wood pallets</li> </ul>
Wisconsin	<ul style="list-style-type: none"> <li>• Newspaper, corrugated cardboard and other containerboard, magazines, office paper, beverage and food containers (glass, aluminum, plastic #1 and #2, steel and bi-metal), foam polystyrene packing material</li> </ul>

NOTE: Commonly banned materials such as yard waste, tires, white goods and batteries are not included. SOURCE: Kessler Consulting, Inc.

cient time between ban passage and its effective date as well as an understanding of the commodity markets are vital to establishing the necessary collection, processing and market infrastructure for the banned materials. In addition, an enforcement mechanism is important to maximize effectiveness of the ban.

Massachusetts and Wisconsin have been at the forefront of using disposal bans as recycling incentive tools. Both states credit these bans with helping to expand private sector investment in recycling infrastructure and increasing diversion rates.

### Bottle Bills

The 11 states with bottle bills make up 29 percent of the U.S. population, but, according to the Container Recycling Institute, they recovered 49 percent of the beverage containers recycled nationwide in 2006. In those 11 states, more than 60 percent of used beverage containers were recycled — compared with only 24 percent in non-bottle bill states (see Figure 3).

Several states have expanded their bottle bills to include non-carbonated beverages such as bottled water; however, it remains an uphill battle to enact a new bill. Only one state, Hawaii, has enacted a new bottle law in the past two decades. In addition, Delaware has repealed its bottle bill effective December 2010, with refunds ending in February of next year.

Questions typically arise regarding the compatibility of a bottle bill and curbside recycling, and the pros and cons of each. Most state bottle bills pre-date the widespread advent of curbside recycling programs; however, extensive and complementary curbside recycling programs have developed in bottle bill states. Curbside recycling targets all types of containers, not just beverage containers. Bottle bill systems are funded by producers, retailers and consumers rather than taxpayers. An added advantage of bottle bills is the funding they provide to states from unredeemed deposits.



**FIGURE 3**  
**BEVERAGE CONTAINER RECYCLING RATE, 2006**

	Aluminum Cans	PET Bottles	Glass Bottles	Total
<b>11 Bottle Bill States</b>	<b>75.8%</b>	<b>44.4%</b>	<b>63.6%</b>	<b>61.4%</b>
<b>39 Non-Bottle Bill States</b>	<b>35.1%</b>	<b>13.6%</b>	<b>12.4%</b>	<b>24.2%</b>
<b>U.S. Total</b>	<b>45.2%</b>	<b>23.5%</b>	<b>27.8%</b>	<b>34.7%</b>

SOURCE: Container Recycling Institute

support is needed to put these policies in place and to provide the resources to implement them. Various special interests — from the private and public sectors — will present their opinions when solid waste legislation is introduced. A true political champion is able and willing to understand the issues and make the tough decisions that are in the best long-term interest of all residents and the environment.

**Good for the Environment and the Economy**

Why strive to maximize recycling? Because doing so benefits both the environment and the economy.

Recycling provides a range of environmental benefits at every stage of a consumer product's lifecycle, from the mining of raw materials through use and final disposal. For most discarded materials, the lifecycle energy savings derived from recycling are greater than if the material had been combusted for energy recovery.

Recycling also creates jobs and is an engine for economic growth. It outpaces the waste management and disposal industry in job creation, and produces commodities with market value.

This article has covered five important policy tools that have been used by states with recycling rates of 40 percent or higher. Part two of this article will discuss five additional key elements used to incentivize local government and private sector investment and innovation in recycling technology and infrastructure. ■

.....  
**Robin Mitchell is a project manager and senior consultant at Kessler Consulting Inc., a national solid waste consulting firm based in Tampa, Fla. She can be contacted at [rmitchell@kesconsult.com](mailto:rmitchell@kesconsult.com) or (813) 971-8333.**

**Product Stewardship**

Product stewardship, also known as Extended Producer Responsibility (EPR), is considered by some to be the most promising approach to developing markets for recovered materials. EPR requires manufacturers to invest in the infrastructure to recover and process their products and/or packaging, thereby relieving local governments of the primary financial responsibility for managing end-of-life products.

Product stewardship has been slow to take hold in this country, with most EPR laws focusing on products that contain toxic materials or are hard for the waste management system to handle when they reach the end of their lives. For example, at least 20 states have enacted such laws for electronics.

Earlier this year, Maine became the first state to pass what is known as "product stewardship framework" legislation, which establishes a process for creating producer responsibility programs. While this is promising, some states, including Florida, are reluctant to take action and are looking to the federal government to take the lead in establishing a national product stewardship policy.

**Political Champion**

In every state or local government that has excelled at recycling, recycling has had a strong political champion. Political

**WASTE AGE INDUSTRY PROFILE**

**Zurich Financial Services Group**

Zurich Financial Services Group is an insurance-based provider with approximately 60,000 employees in more than 170 countries. Since the early 1990s, Zurich in North America has been providing environmental insurance products to major industries. Today,

- Zurich is one of the largest underwriters of environmental insurance in the U.S.
- Zurich insures 30% of the largest revenue producing environmental firms in the U.S.
- More than 8,000 of Zurich's environmental customers have stayed with us for more than five years.
- Regionally-based underwriting teams, 100-strong, understand the local regulatory climate.
- Many within Zurich's environmental claims department have legal degrees and environmental consulting backgrounds.

For more information, visit [www.zurichna.com/environmental](http://www.zurichna.com/environmental).

**Customer Inquiry Center**  
Zurich North America  
1400 American Lane  
Schaumburg, IL 60196  
Phone: 800-382-2150  
E-mail: [info.source@zurichna.com](mailto:info.source@zurichna.com)

