



POLICIES & REGULATION

Related to strategy, municipalities should consider circular economy policies (e.g., creating legal enforcement mechanisms for source separation, segregated waste collection streams) to underpin the system and support ongoing improvements. Implementing these policies may involve new regulations or more regulatory enforcement. However, municipalities have varying levels of regulatory control. Some cities may be able to pass more comprehensive waste management legislation, whereas other municipalities may be more dependent on regulation at the federal or state/provincial level. Regardless of the level where the policy is implemented, public institutions' support of a strong waste management system is a critical unlock to enabling the three performance drivers. For example, governments can leverage policy interventions to help create strong incentives for material offtake, driving demand and supporting system economics.

KEY ACTIONS:

- Establish standards to reduce GHG emissions and other environmental impacts from waste
- Orchestrate waste policies and regulations to incentivize circularity
- Ensure sufficient resourcing for enforcement and monitoring of regulations



RETHINKING RECYCLING INDONESIA IN DENPASAR, BALI

*SUPPORTING LOCAL AND REGIONAL GOVERNMENTS TO IMPLEMENT
POLICIES THAT ENABLE RECYCLING AND CIRCULARITY*

SITUATION

Bali residents, tourists and organizations generate 1.6 million tons of waste per year, of which 303,000 tons is plastic (19.6% of total waste).¹⁶ Most communities in Indonesia lack access to effective waste management systems, leading to widespread dumping and burning of waste, with little to no recycling. To combat this crisis, the Indonesian government's environment agency introduced Indonesia's National Action Plan on Marine Plastic Debris, a commitment to reduce ocean plastics by 70% by 2025. Delterra partnered with village leaders and local communities to develop a meaningful waste management strategy that handles the end-to-end waste stream.

ACTION

Our Rethinking Recycling program catalyzes the development of business models and operations for waste management stakeholders that are necessary for the sustainable enforcement and enactment of regulations on source separation. In our pilots in Denpasar, we worked with different stakeholders such as local sorting facilities (TP3SRs), waste collectors and community educators to build waste management operations that supported existing policies on source separation and enabled access to services for more residents. We did so by:

- Scaling up services to ensure that more communities have access to waste management
- Building operating models that integrate existing infrastructure
- Improving collection fee payment rates to ensure the operation is financially sustainable in the long run
- Improving the operators' financial literacy

RESULT

We have reached participation rates of up to 80% in our first cohort of six villages in Denpasar, through the combination of bottom-up education and top-down regulatory enforcement. In addition, these villages have increased their spend on waste management by 60% year on year since the program was launched. At the national level, the government has unlocked USD 7M in capital funding to build additional waste management infrastructure, as well as putting top-down pressure on local governments to speed up the transformation.



DIMENSION: POLICIES & REGULATION

USING POLICY AND REGULATION TO DRIVE ZERO WASTE TARGETS IN SAN FRANCISCO¹⁷

SITUATION

San Francisco is a culturally diverse city on the west coast of the USA, with a population of over 800,000 inhabitants (as of 2021). Since the turn of the millennium, the city has been committed to an ambitious zero waste agenda.

ACTION

Regulation has played an important part in driving the city's successes in waste management:

- In 2009, the Mandatory Recycling and Composting Ordinance was passed, requiring all residents to separate recyclables, organics, and residual waste – this was the nation's first mandatory composting law and is enforced through penalties to businesses that fail to comply
- In 2018, the Commission on the Environment also adopted a resolution outlining the Department of the Environment's commitment to racial equity and announcing its Racial Equity Initiative. This transformed source separation educational outreach by redesigning materials to use images and provide Chinese, Spanish, and other language translations. Customer service is available in almost any language. Waste management services were also broadened, with a range of bin sizes and frequency of collection options being made available
- San Francisco also has a unique long-term refuse (recyclables, compostables, and residual waste) ordinance where the city sets collection rates. This ensures consistency and fair pricing in waste management services. It also provides the option for behavioral nudging. Initially, trash collection rates were set much higher than those for recycling and compostables (although rates are more comparable now)

RESULT

In 2002, San Francisco adopted a goal of 75% diversion by 2010; a goal that it exceeded two years early, soon recovering over 80% and cutting its disposal in half. In 2018, San Francisco updated its zero waste commitments to reducing solid waste generation 15% and disposal to landfill or incineration again 50% by 2030. San Francisco sends less trash to landfill than any other major US city.

