

## Plastic Waste into Possibilities.

# Executive Summary



Lake Atitlán is drowning in plastic—3,000 metric tons of it flood into its waters every year, threatening one of Guatemala’s most iconic natural landmarks. This plastic seeps into its biodiversity, and the health of the residents and the tourists. Keystone Plastic Solutions (KPS) is here to enhance waste management around Lake Atitlán, to preserve ecological health and support the local economy. Our approach focuses on expanding accessible waste collection points, particularly in common areas such as markets, schools, and community centers.

Keystone Plastic Solution (KPS) proposes a comprehensive approach to tackle this crisis with a scalable, community-driven waste management system. In partnership with Atitlán Recicla (a women-led recycling co-op) and Max-R (a leader in recycled products), we’re deploying collection bins made from recycled local plastic, placed in high-traffic sites like markets, schools, and businesses.

In partnership with Max-R, we are transforming waste into value by collecting recycled plastics from the Lake Atitlán area to produce and distribute recycling bins and outdoor furniture for local businesses and universities.

To address waste pollution in Lake Atitlán, we are introducing smart recycling bins equipped with QR codes. Users can scan the QR code via our mobile app to log their recycling activities and earn points. Accumulated points can be redeemed for discounts at participating local restaurants and hotels, fostering a mutually beneficial relationship: businesses gain visibility and customer engagement, while individuals receive rewards for responsible waste disposal. This initiative promotes environmental sustainability and stimulates local economic growth.

With Guatemala’s waste management market projected to grow 12% by 2029, KPS is uniquely positioned to lead in both waste management and the recycled products market. Our hybrid revenue model combines institutional funding, corporate partnerships, and product sales to drive long-term sustainability. KPS’s financial model is built on a combination of institutional funding, corporate partnerships, and revenue from recycled plastic products. The initial capital requirement to launch operations is \$493,600, covering recycling bin production, waste sorting facility setup, mobile app development, staff salaries, community engagement efforts, and operational expenses. As a capital intensive business, we project profit in Year 4 with a Net Income of \$16,711 and quickly scaling to \$78,211 the following year.

**Vision:** A clean and revitalized Lake Atitlán, Guatemala, and World.

**Mission:** Empower and facilitate the revitalization of Lake Atitlán and its inhabitants, businesses, and communities through a sustainable waste management service.