Introduces

Sustainability Management Solutions by

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Our Mission, Vision & Goal

▶ Enable compliance with new CA regulations.
  - AB 341 and SB 1383 require the state to achieve 50% reduction by 2020 and 75% reduction by 2025.
  - Some cities are more ambitious and want to reach zero by 2022 making it part of their plan.

▶ Provide waste receptacle monitoring with management reporting via remote sensors and software solution.

▶ Accumulated knowledge over time to improve and stabilize cost of services in the future.
The Big Problems

► We are running out of landfill
► We are polluting the planet
► We are adversely affecting future generations
► Cities must comply with new regulations
  ❑ AB 341 and SB 1383 require the state to achieve:
    ▪ 50% reduction by 2020
    ▪ 75% reduction by 2025
The Local Problems

- Students cross contaminate the compost or recycling bins
- Proper signage throughout entire District
- Teachers allow students to eat in classroom causing food scraps to be generated in class without proper disposal.
- Custodial staff emptying bins that are not full
- Increase in cost of processing of recycling and compost
The Solution: **S.M.S.™**

- Install monitoring devices on carts

CIWA provides:

- Analytics and management reporting
- Exception reporting for school audits
- Recommend changes to school site for compliance where needed
- Real-time monitoring via website & mobile app
Sustainability Management System (SMS)

- Residential: Monitor Behavior
- Commercial: Audit Hauler
- Municipal: Optimize Efficiency
- Order Service & Report Results
- Landfill: Track Diversion
- M.R.F.:
Diversion by School Site

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Cost Savings due to SMS System

▶ 2015-2016 Annual budget $257,973

Implementation of SMS System District Wide
Summer 2016

▶ 2016-2017 Annual budget $171,544
(33.5%) cost reduction.
S.M.S™ Provides...

- District monitoring of their waste/recycling **volumes** and **diversion percentages** are critical to meet state requirements of new regulations to avoid fines.
- **Data analytics** to improve waste/recycling services providers reports, better education tool, and monitoring the plan success.
- **Improved customer behavior** in recycling and waste removal by monitoring carts and educating students.
- **Reduced** waste and pollution today and **save** tomorrow.
Underlying Technology

- Sonar-based technology with Wifi, Cellular, GPS, tilt, cameras, heat (depending on brand and cost)
- Web-based portal and data repository of current status, exceptions, and trends over time
- More IOT patent pending technology to manage installations
Admin Account: Access to all user accounts, about to create new account, all sites and carts, GPS locations active. Same capabilities, but more expansive and comprehensive.
Custodial Waste Management Flow Chart

Service volume: ________________
Service day(s): ________________

- No food still in plastic wrap
- No black liners allowed
- 10% wrong stuff allowed

No food still in plastic wrap
No black liners allowed
10% wrong stuff allowed

Break down cardboard boxes
No black liners allowed
10% wrong stuff allowed

When illegal dumping is a problem, keep this dumpster unlocked and lock recycle and compost.

If service is missed, especially compost, call immediately for special pick up by CIWA Inc.