kando

IMPROVING WASTEWATER QUALITY AND PUBLIC HEALTH THROUGH DIGITIZED SEWAGE DATA

Kando's wastewater intelligence platform provides actionable insights for the everyday operation of utilities and wastewater treatment plants

Kando's solution provides water utilities with complete real-time oversight of wastewater quality and pollution events in their collection system, so they can make data-driven decisions to improve effluent quality, allow safe water reclamation, and save costs.

Data is collected and analyzed via artificial intelligence with clear insights displayed in a real-time dashboard.

Kando consolidates its product offering into two key components: Quality Pulse and Community Health Pulse. Quality Pulse provides cutting-edge wastewater analytics capabilities throughout a customer's network (usually wastewater utilities), while Community Health Pulse is centered on WBE (Wastewater-Based Epidemiology), which helps public health authorities introduce data-driven preventive policies.

Reducing wastewater pollution also has climatic benefits – by making sludge available for land use rather than landfill, and through reducing COD in effluents, tons of CO_2e emissions are avoided.

Sustainable planet

X3.4

Annual impact growth

42

Municipalities covered + 42 with public health solution
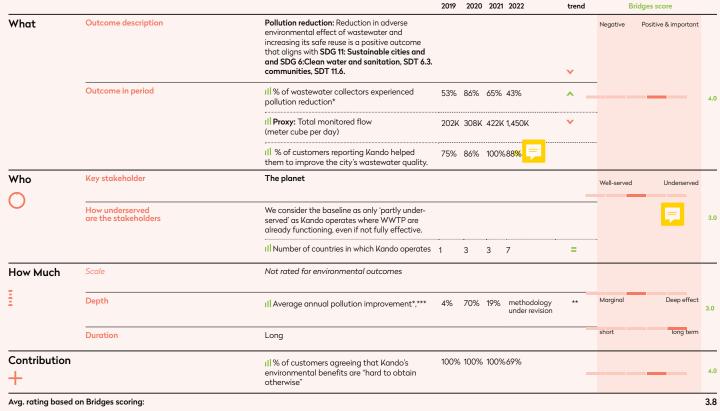
59

Customers' NPS

IMPACT HIGHLIGHTS

Supporting Direct Potable Reuse by Improving Wastewater Quality in Texas

Prolonged droughts and depleted groundwater levels have led El Paso Water (EPW) to develop alternative water sources. The municipality will be among the first in the US to utilize direct potable reuse, passing secondary effluent from the Roberto Bustamante Wastewater Treatment Plant through an Advanced Water Purification Facility before redistributing it to consumers. To deploy a successful program, wastewater entering the treatment plant must comply with strict quality standards 24/7. Operators must be able to detect abnormal discharges to the network as they happen and act to support wastewater stability.

Using Kando's system, EPW operators have gained real-time network oversight, enabling them to identify industrial areas contributing to high pollution loads, pinpointing a few food and beverage factories as the primary source of these events, and taking measures to avoid them.

Annual impact statement

			2019	2020	2021	2022	trend	Bridges score
What	Outcome description	**Pollution reduction:** Reduction in adverse environmental effect of wastewater and increasing its safe reuse is a positive outcome that aligns with **SDG 11: Sustainable cities and and SDG 6:Clean water and sanitation, SDT 6.3. communities, SDT 11.6.**					˅	Negative ← → Positive & important
	Outcome in period	ıll % of wastewater collectors experienced pollution reduction*	53%	86%	65%	43%	˄	**4.0**
		ıll **Proxy:** Total monitored flow (meter cube per day)	202K	308K	422K	1,450K	˅	
		ıll % of customers reporting Kando helped them to improve the city's wastewater quality.	75%	86%	100%	88%	💬	
Who ○	Key stakeholder	**The planet**						Well-served ← → Underserved
	How underserved are the stakeholders	We consider the baseline as only 'partly under-served' as Kando operates where WWTP are already functioning, even if not fully effective.					💬	**3.0**
		ıll Number of countries in which Kando operates	1	3	3	7	=	
How Much ⋮	*Scale*	*Not rated for environmental outcomes*						
	Depth	ıll Average annual pollution improvement*,***	4%	70%	19%	methodology under revision	**	Marginal ← → Deep effect **3.0**
	Duration	Long						short ← → long term
Contribution ＋		ıll % of customers agreeing that Kando's environmental benefits are "hard to obtain otherwise"	100%	100%	100%	69%		**4.0**

Avg. rating based on Bridges scoring:	**3.8**
Impact Classification:	**C**ontributing to solution

* We attribute a portion of 2020 improvement to the effects Covid-19 had on the economy and polluting sectors.
** Since the data indicate annual change, for some clients this is on-top of previous improvements, so the trend is misleading. 2022 showed mixed results which we believe has to do with external factors. The company now develops a better assessment methodology to isolate its effect.
***Calculates change in pollution score at the point closest to the WWTP compared to previous year.