

Al-Raha Beach, Abu Dhabi

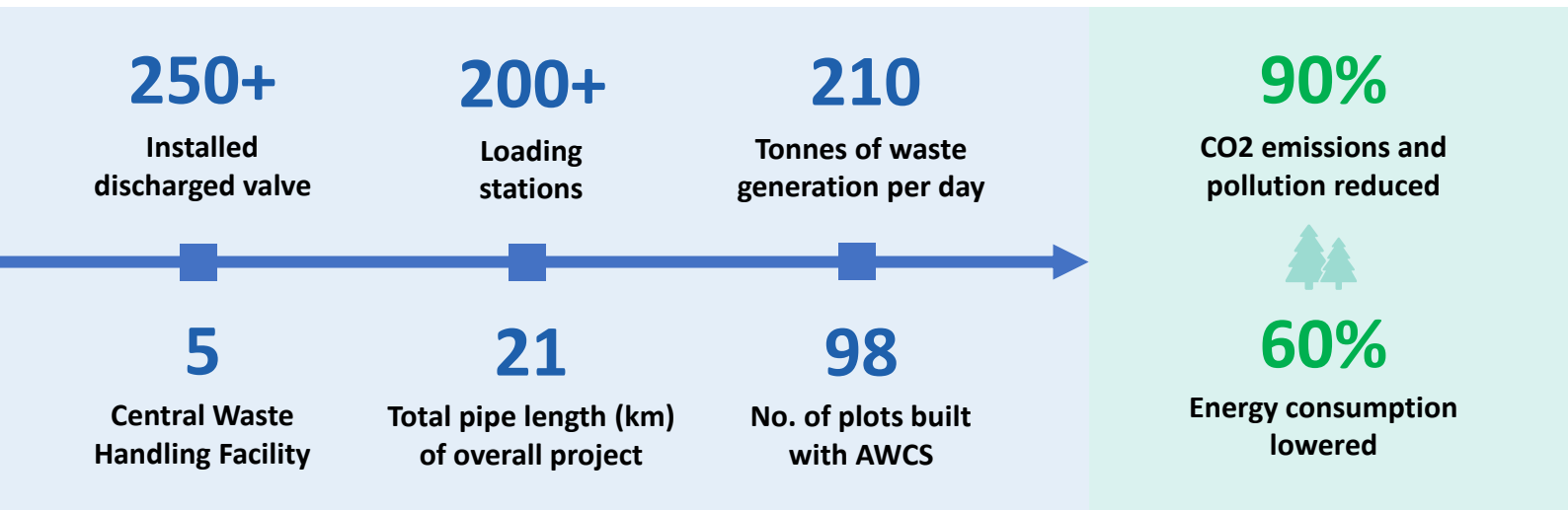
STREAM Automated Waste Collection System
in Abu Dhabi's Premier Coastal Community



ABOUT PROJECT

Al Raha Beach is a prominent waterfront development, spanning approximately 6.8 million square meters along an 11-kilometer coastline. This self-contained city hosts over 120,000 residents and a strong commitment to sustainability, with an emphasis on LEED-certified green building practices and eco-friendly design.

STREAM is honored to partner with ALDAR PROPERTIES, seamlessly incorporating the Automated Waste Collection System (AWCS) into Al Raha Beach, pioneering a sustainable approach to waste management.



AWCS in Al Raha Beach – Installation of the longest waste pipeline infrastructure

The system extensive pipeline network covers 4 precincts in Al Raha, allowing:

- **Efficiency:** AWCS streamline waste collection, reducing the need for manual labor and traditional waste collection vehicles.
- **Environmentally Friendly:** Minimize carbon emissions and environmental pollution, aligning with Al Raha Beach's commitment to sustainability and reduced environmental impact.
- **Enhanced Aesthetics:** The absence of visible waste bins and trucks results in a cleaner and more visually appealing urban landscape.
- **Optimized Space:** Eliminate the need for large waste storage areas within buildings, allowing for the efficient use of valuable space for other purposes.

PROJECT OVERVIEW

Location: Abu Dhabi, United Arab Emirates
Developer: Aldar Properties
Project Startup: 2009
Project Completion: 2011
Size of Development: 556 ha



AWCS Type: Gravity Vacuum + Full Vacuum + Screw Feeder (District Wide System)
Total Pipe Length: 21 km
Capacity: 210 metric ton/day



Pipe installation in 2010



Load Station – Provided on every floor; mixed and recyclable waste.



Discharge valve – Automated operations and controlled waste release.



Compactor container – Automated operations, compact waste and stored in air tight container.



Centrifugal fan – Create high volume of airflow up to 25 m/s.



AUTOMATED WASTE COLLECTION SYSTEM