



**Category:** Solid waste treatment and Recycling, Renewable Energy.

**Sub Category:** MSW treatment plants, Recycling, Biogas.

[www.arrowbio.com](http://www.arrowbio.com)

## Company profile

The ArrowBio treats Municipal Solid Waste. Through a unique hydro-mechanical process it recovers 75-80% of the recyclable materials and by wet biological techniques it produces biogas and soil improver. ArrowBio is fully industrial since 2003, and is ranked worldwide as the most cost-effective system for treating MSW ecologically.

**Year of establishment:** 1999

**No. of employees:** 32

## Background on the company

Arrow was created in 1999 as a spin-off that focuses on solutions for green treatment of Municipal Solid Waste (MSW), which is one of the biggest ecological problems of the planet. ArrowBio® is a unique technology (registered patents) that successfully treats MSW, to recover recyclables and produce renewable energy. ArrowBio® can handle residential and/or commercial MSW, accepting both unsorted and/or sorted waste streams, with its Heterogeneity, Variability, Abrasiveness and Wetness. Arrow's unique technology greatly differs from traditional Mechanical Biological Treatments (MBT), Anaerobic Digestions and other Methanization systems, by offering a unique Hydraulic Separation & Preparation with a Liquid Anaerobic Treatment. Arrow customers benefit from: sending merely 20% residues to landfills, substantially increasing recycling percentages, minimizing pollution, reducing waste treatment costs, producing renewable electricity, fast deployment and simple permitting process, becoming environmental leaders, creating new green jobs etc. Numerous technology reviews performed by consulting companies and authorities on ArrowBio technology have Praised ArrowBio, including: New York City, Los Angeles County, Juniper consulting, Douglas Partners consulting etc.

**Major clients:** Regions, Municipalities and waste companies that handle Municipal Solid Waste, including: Tel Aviv, Sydney, California etc.

## Examples of past projects

- Tel Aviv plant- operational since December 2003
- Sydney, Australia- with local partner "WSN Environmental Solutions"-operative by June 2008.
- Scotland- Stage of final planning.
- Pachuca, Mexico- Stage of pre-planning.
- Short-listed in the tenders of New York, Los Angeles, Santa Barbara and others.

## Technology & product(s)

The ArrowBio plant receives Municipal Solid Waste input (both pre-sorted and unsorted), separates it to its basic elements (recyclable materials, biodegradable organics and residues) using a combination of dry and wet, automatic and manual processes, and then prepares and treats the biodegradable portion, to produce renewable energy and clean digestate.

The separation part includes various elements that sort by: size, weight, conductivity, water floating, water sinking, air blowing, shredding and other means.

The biodegradable organics are separated and prepared for the biological process, by means of water dissolving, hydro-crushing, in-line shredding, filtering, screening, and other means.

Arrow's patented process combines Hydro Mechanical Separation with Liquid Anaerobic Treatment. This unique combination provides: very high recyclables recovery rate (>75%), clean organic stream, no odor or pollution, high amount of and high quality biogas used to create renewable energy, clean digestate used as fertilizer, self produced electricity and water, and more. For more please visit: [www.arrowbio.com](http://www.arrowbio.com)

## Objectives / Target companies

Regions, Municipalities and waste companies that handle Municipal Solid Waste.