Founded in 2016

Located in Azusa, CA

US based operation of ECONWARD

US Marketing, Distribution, Manufacturing, and Service Support

Lab operation for sampling and R&D
**DESIGN**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Compatible with</td>
<td>MRFs and MBT facilities</td>
</tr>
<tr>
<td>Scalable and modular system</td>
<td></td>
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<tr>
<td>Residence time</td>
<td>20 minutes</td>
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<tr>
<td>Footprint</td>
<td>3,000 ft²</td>
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</tbody>
</table>
| Capacity PER UNIT | 6.6 ton/h (52,000 ton/year)  
| | 330 days/year - 24 h/day |
LAB

- **Testing facility** for various organic waste streams

- **Biomass production** as resource:
  - Accelerated compost
  - Fertilizers
  - Organic soil amendment
  - Building materials
  - Biomethanation
  - Biofuels
Our technology works as a pretreatment for AD processes, both digestion and codigestion.

**Hydrolyzed material features and benefits for digester feeding:**

- **Uniform:** improves digester operation without additional pretreatments and feedstock dependance.

- **Free of Pathogens:** helps methanogenic bacteria colonize the material faster.

- **Chemically degraded:** the most complex molecules break down providing an efficient transformation.
ANAEROBIC DIGESTION

Output benefits:

- **Increased Biogas production** and yield at the same methane composition rates
- **Increased Gas production performance** for internal energy consumption
- **Combined Heat and Power** (CHP)
- **Hydraulic Retention Time** (HRT) **reduction**:
  - Smaller digester designs for improving cost effectiveness
  - Treatment capacity enhancement for existing digesters
- **Continuous digester feeding** → easy to integrate
ACCELERATED COMPOST

The thermal hydrolysis process takes the biomass to the end of the Cooling Stage in 20 minutes, leaving the Maturation Stage only to achieving a high quality compost.

Composting time as well as atmospheric emissions are reduced.

Compliance as a processor for composting operations and further regulations such as SB 1383.
SOIL AMENDMENT

The technology is capable of transforming any of feedstock to prepare **different mixing “recipes”**:  
- Food waste  
- Green waste  
- Residual materials from MBT plants  
- Manure  
- Other Organic Waste streams

This helps to produce different materials in accordance with the **requirements of California Department of Food and Agriculture (CDFA)**:  
- Bulk soil amendment  
- Packaged soil amendment  
- Commercial/Specialty Fertilizers
**BIOFUELS**

Pathogen-free and thermally stabilized pellets

→ Easy to handle and store.

Mixing *feedstocks from materials that are not subject to being recovered*. For example, MRF fines.

Using residual materials in Waste-To-Energy

Various “recipe” designs to meet environmental standards:

- Chlorine
- Ash
- VOCs
- GHG
OVERALL BENEFITS

• Treats the organic fraction of MSW

• Involves a fully-automated plant with low Operational Expenditure (OPEX)

• Helps accelerates composting process reducing time, footprint and GHG emissions

• Increases biogas yield by reducing the AD process time thus ensuring stability and continuity during the procedure

• Offers high treatment capacity, modularity and scalability
  → 6.6 ton/hour
  → Surface area of 3,000 ft²
CARBON FOOTPRINT REDUCTION

Compared to landfilling, we avoid:

5,270 MtCO₂ eq/year

A single module processes:

6.6 ton/h

GHG emission avoidance equivalent to:

1,850 acres of forest