# ROCKWOOD AG-GRID ORGANICS LLC

Communication

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#### **Rockwood Ag-Grid LLC Background**

- Rockwood Ag-Grid LLC (RAG) represents the partnership of Ag-Grid Energy LLC (AGE) of Kennett Square, Pennsylvania and Rockwood Farms of Granville, Massachusetts.
- Our collective goal is to produce clean and renewable energy from agricultural and consumer waste through anaerobic digestion. This process takes the animal waste, cow manure in this case, produced on the farm and pumps it into an anaerobic digester (AD).
- Continuously mixing the manure for 3-4 weeks of residence time, the digester expels a substance called digestate, of which the solid form is used as animal bedding and the liquid form is used as a fertilizer.
- Trapped within the tank is biogas that is then converted into electricity to be used on the farm and the excess sold back to the grid. The digester used on Rockwood Farms is a codigester, able to take animal waste as well as organic food waste.

#### Rockwood Ag-Grid Digester 450 KW – Granville, Massachusetts Receiving liquid food waste since April 2018



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#### On an annual basis Rockwood Ag-Grid LLC is producing

- 3.5 Million kilo watt hours of electricity
  - electricity for Rockwood Farm
  - excess electricity to serve the local community such as Town of Granville
- Heat for Rockwood barn floors, house and water (replace oil and wood burning)
- Reducing farm odors
- Recycling ~30,000 tons of food waste from the local area
- Reducing Millions of tons of carbon dioxide emissions, and
- Generating an ongoing cash flow for Rockwood Farms sustainability

#### **Rockwood Ag-Grid Facility - Waste to Energy Schematic**



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Ag-Grid Applied for the Q4 2017.

Grant value, up to \$250,000.00

Contract was signed February 2018 for the receipt of this grant.

The funds were used to purchase a Thor De-Packaging unit.

Decision was made to move towards food waste de-packaging, Food waste slurry will enhance methane production and increase the renewable energy goal.

2023, we processed 6,159 ton of packaged food waste, generating 1,231,722 gallons of slurry for AD

### **Recycling Business Development Grant**



#### **Rockwood Ag-Grid Organics has installed a Scott's Thor system**



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#### **RAG-O Depackager Construction is Complete! Project is now commissioned!**



## Food waste market focus is shifting from liquid waste to solid waste that supports Rockwood Ag-Grid Organics concept

- Liquid food waste
  - Fats, Oils and Greases
  - Food Processing Waste
- Transportation/Collection
  - Tanker trucks with pumps
- No additional management
- Less complexity
- Less odor management

- Solid/Packaged food waste
  - Clean streams
  - Contaminated/mixed stream
- Transportation/Collection
  - Box trucks
  - Specific Organic trucks
- Packaging Disposal Management
- More complexity
- More odor management

#### What can Rockwood Ag-Grid Organics Process?

- The depackager could process 100 tons/day
- The depackager can process
  - Solid food such as fruits and vegetables
  - Plastic packaged food
  - Aluminum cans with food waste
  - Tin cans with food waste
- The team would process
  - Palletized and boxed food waste to prepare
  - Totes of liquid food waste
  - DAFs
- The depackager cannot process
  - Glass

#### **Contacts**

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