June 20, 2016

The Honorable Tom Vilsack Secretary, U.S. Department of Agriculture 1400 Independence Ave., S.W. Washington, DC 20250

Dear Mr. Secretary:

On behalf of the City of Battle Creek, the Battle Creek Community Foundation, and Battle Creek Unlimited, the community's economic development agency, thank you in advance for your consideration.

Battle Creek is a food town, and although a relatively small community of 50,000 residents we have organizations representing every aspect of the American food system, including farmers, major food manufacturers, a regional Feeding America food bank, mass feeders, and grocery and restaurant outlets.

**In response to your announcement** in September 2015 that the U.S. would pursue a goal of 50% reduction in food waste by 2030, a diverse and committed Food Waste Solutions Committee formed in Battle Creek to generate a viable and unique contribution toward this goal.

After an intensive review of national activity and research related to food waste reduction and recovery, including investigation into the empirical achievements of the Rural Iowa Food Waste Reduction Project, we propose for your consideration the development of a comprehensive test market laboratory in Battle Creek to demonstrate how a zero food waste community may be achieved.

A <u>Food Waste Solutions Institute</u> would build upon and innovate existing research and activity and would coordinate a mixture of both 'upstream' reduction initiatives and scaled 'downstream' recovery technologies. Benefits to communities nationwide would include access to: tested and aggregated tools and resources, active demonstration of best practices, and technical assistance related to applied, value-recovery technologies such as anaerobic digestion and composting.

Battle Creek's unique history as a "food community" along with its incredible array of food science assets and expertise, coupled with its competency in test market research and subsequent scaling and replicating of food production systems, make it the ideal community to develop such an Institute.

The research and development of this concept has been underwritten by the Battle Creek Community Foundation. The Food Waste Solutions Committee now seeks to identify and secure appropriate funds to <u>establish</u> the initiative, which would be sustained by earned revenue and segmented financial support from other funding agencies, once operational.

We believe our concept aligns completely with the vision of the U.S. Department of Agriculture in its overarching goal of national food waste reduction. However, as is often the case with progressive initiatives, the framing of our proposal does not appear to neatly fit into any one of the available USDA funding mechanisms. It is, therefore, not immediately clear how our Committee might responsibly and creatively be funded by USDA, in spite of the directional and programmatic fit we believe exists between this overarching goal and our direction. As such, Battle Creek respectfully requests your consideration in how the launch of the Food Waste Solutions Institute might be funded. This request is detailed in an attachment to this letter and is formatted to reflect a Rural Utilities Services grant proposal.

The Planning Committee thanks a host of generous people tied to your Department who have contributed to the development of this concept, including:

Elise Golan, Director for Sustainable Development for USDA
Derek Jones, Community Programs Specialist for USDA RD
Jim Turner, MI State Director for USDA RD
Traci Smith, MI Director of Business and Cooperative Programs for USDA RD

Please do not hesitate to contact Bill Schroer, who serves as the Committee's spokesperson. He can be reached at <u>bschroer@socialmarketing.org</u> or 269-963-4874 and he is prepared to clarify and present the plan in greater detail. Thank you again for your consideration.

Best Regards,

Brenda Hunt

President and CEO

**Battle Creek Community Foundation** 

Rebecca Fleury

City Manager

City of Battle Creek

Bill Schroer

Principal

WJSchroer Company and Co-founder at Food Forge

Cc: Senator Debbie Stabenow

See Attachment 1: Funding Request

A proposal for USDA support in the establishment of a

# **Food Waste Solutions Institute**

in Battle Creek, Michigan to serve as a national test market laboratory for the aggregation of food waste reduction knowledge and resources and the parallel, coordinated testing and training of scaled food waste recovery technologies.

# **Project: Food Waste Solutions Institute**

#### 1. Project Summary:

The proposed Food Waste Solutions Institute (Institute) aims to transform Battle Creek into a "Zero Food Waste" community and support USDA goals for national food waste reduction by identifying, evaluating, and sharing best practices and multiplier effects for both reduction and recovery of food waste.

A Food Waste Solutions Committee (Committee) was assembled in late 2015 by George Franklin, former Vice President of Worldwide Relations for Kellogg Company, to assess Battle Creek as a comprehensive test market laboratory for the reduction, capture, reuse/recycle or reconfigure of diverse community food waste inventories.

- Committee is led by Battle Creek businessman Bill Schroer, owner of WJ Schroer Co – a 28 year old market research consulting firm, and Co-founder of Food Forge - a food enterprise accelerator.
- Committee's initial research and development is supported by Brendan McCrann, owner of Future Pointe a Colorado-based food waste recovery consulting firm.
- Committee is underwritten by The Battle Creek Community Foundation.

The Committee's plan for the Institute will achieve both upstream (reduction) and downstream (recovery) outcomes and will feature new and existing research and best practices, including data and aggregated knowledge generated by the Rural Iowa Food Waste Reduction Project.

#### 2. Needs Assessment:

Food waste is a rising star in the constellation of international food industry attentiveness and a waste challenge without adequate or tested solutions. The U.S. spends over \$218 billion – 1.3% of GDP – growing, processing, transporting, and disposing of more than 30% of the food supply. Given this, food waste is now attracting extraordinary visibility. Internationally, Italy and France have outlawed the practice of supermarkets throwing away usable food. Domestically, Vermont and Massachusetts and the cities of San Francisco, CA, Portland, OR, and Boulder, CO have recently adopted laws restricting how much food can be disposed of in landfills.

Still, no comprehensive approach to food waste reduction and recovery exists and in many communities little or nothing is being done to address the issue. The challenge of addressing community food waste with appropriate education, scale, and technology is of particular concern in rural areas, where the cost of food importation and waste exportation place a disproportionate burden on lower income, working class Americans.

If the United States is to reduce food waste 50% by 2030, per the USDA's recently announced goal, communities nationwide need tools for customizing solutions to their own food waste streams, resources for stimulating individual and systemic behavior modification, guidance prioritizing the allocation of limited resources to community-specific reduction and recovery strategies, and access to demonstration, expertise, and training related to expensive and emergent technologies promising waste-to-energy or waste-to-soil outputs.

At present there exists no known institute where food waste solutions are studied and resources, best practices, and active demonstration and training are accessible to interested individuals, organizations, and communities.

Battle Creek is a relatively small community of 50,000 residents yet features representative organizations from throughout the food system enterprise, including:

- major food manufacturers
- agricultural producers
- a regional Feeding America food bank
- mass feeders
- grocery outlets
- restaurant outlets

When interviewed, various stakeholders operating inside the Battle Creek's food system identified food waste as a visible and ongoing threat to both bottom lines and environmental values. Each interviewee welcomed an alternative to the landfill. An assortment of representative interviewees emerged as promising candidates to participate in a test market laboratory.

Battle Creek would serve as the Institute's first customer, effectively advising and incubating its own zero food waste environment. Beyond this, the Institute would be available to demonstrate, train, test and advise interested parties throughout a national service area. The institute would impact economic development, environmentally sound waste disposal, and broad USDA goals for the U.S. food system.

#### 3. Project Goals and Objectives:

- 1. Goal: To inform optimal food waste **reduction** activities.
  - a. Objective: Employ Researchers to generate data and best practices:
    - Activity: aggregate published existing research regarding food waste reduction, including traditional and restructured donation models, educational curriculum, public relations behavior modification campaigns, incentive programming, retail model restructuring, and "seconds" marketplace development
    - ii. Activity: aggregate media and general information about pending legislation, ongoing public relations campaigns targeting date-labeling, and real and perceived barriers to donation and animal feeding.
    - iii. Activity: consult with Feeding America regarding internal strategies and external alliances to increase donation to food bank agencies nationwide
    - iv. Activity: perform outreach to research agents, such as NRDC, ReFED, and the Iowa Waste Reduction Project, to procure data sets generated in actual research of actual communities and industries about the presence and effectiveness of reduction activities (including date-labeling education, PR campaigns regarding consumer behavior, and donation)
    - v. Activity: establish formal working partnerships with research agents regarding proprietary data or services.

- vi. Activity: building upon existing research, host focus groups with stakeholders (manufacturing, agriculture, nonprofit, mass feeder, grocery, restaurant) to understand patterns, economics, chain of custody, chain of command, motivations, fears, and barriers related to food waste reduction in each various segment of industry
- vii. Activity: synthesize all aggregated information and organize or formulate resources for consumers, based on industry segments, which inform logical, strategic decisions with research-based impact.
- b. Objective: Employ regional college/university interns to support Researchers.
- c. Objective: Sort and segment data, best practices, lessons learned, and multimedia evidence into protected computer and web databases.
- d. Objective: Host periodic dialogue/synthesis with renowned or emergent food systems experts, technicians, thought leaders, and innovators.
- e. Objective: Test and track known strategies:
  - Activity: design and facilitate regional, research-based public relations campaigns targeting <u>individual</u> consumer purchasing, storage, and consumption patterns impacting overall food waste inventories
  - ii. Activity: design and facilitate various follow-up survey activities to capture reactions, attitudes, and behavior changes.
  - iii. Activity: design and facilitate regional, research-based educational curriculums targeting youth attitudes and behaviors regarding food waste.
  - iv. Activity: design and facilitate various follow-up survey activities, including with youth family members, to capture reactions, attitudes, and behavior changes.
  - v. Activity: design and facilitate regional, research-based commercial incentive programs (in various industry segments) such as green accreditation or rebate.
  - vi. Activity: design and facilitate various follow-up survey activities to identify and characterize systems modifications.
- 2. Goal: To inform optimal food waste **recovery** activities.
  - a. Objective: Employ Researchers to generate data and best practices.
    - Activity: aggregate all existing research in the area of food waste recovery, including traditional strategies such as informal animal feeding and various emergent strategies such as anaerobic digestion and in-vessel composting.
    - ii. Activity: perform site visit outreach to existing operators/developers of technologies to observe functionality, impact, barriers, and attitudes (to include but not limited to various scales of livestock operations, windrow composting facilities, in-vessel compost facilities, onsite applications of rapid dehydrators and composters, mobile and fixed anaerobic digesters)
    - iii. Activity: document above technological applications using various forms of media, including photography, video, and operator interviews
    - iv. Activity: secure price quotes from developers of above technologies for application/installation at all levels.
  - b. Objective: Employ regional college/university interns to support Researchers.
  - c. Objective: Sort and segment data, best practices, lessons learned, and multimedia evidence into protected computer and web databases.

- d. Objective: Host dialogue/synthesis with waste recovery experts, technicians, thought leaders, and innovators.
- e. Objective: Purchase and site a variety (based on size, use, cost, and degree of projected impact) of technologies/mechanisms (to potentially include: mobile anaerobic digestion, onsite in-vessel composting, manual and/or small scale mechanical de-packaging equipment, and storage and refrigeration tools).
- f. Objective: Perform tests using real food waste inventories.
  - i. Activity: track food waste segments: input types, sources, and volumes
  - ii. Activity: track characterization: moisture content, packaging contamination, perishability stage
  - iii. Activity: observe and note the function and operation of technologies/mechanisms, including relationships between volumes and times of inputs with the value of outputs
- g. Objective: Segment specific streams for animal feeding.
  - i. Activity: examine legal implications of animal feeding
  - ii. Activity: segment select, legitimate inventories and track type, source, volumes, and characterization
  - iii. Activity: establish agricultural partnerships for testing effectiveness of inventories as animal feed
  - iv. Activity: design and facilitate tracking mechanisms with agricultural partnerships to capture feed volume conversions to animal weight gain, controlled recipes, barriers, risks, best practices
  - v. Activity: aggregate on-site data for use in optimizing pre-site segmentation and preparation (operational feedback loops)
- h. Objective: Market the Institute as a hub for innovation and testing of new technologies/mechanisms.
  - Activity: establish working relationship with regional colleges/universities regarding engineering, sustainability, food systems, agriculture, nutrition, public administration, leadership, controlled testing,
  - ii. Activity: notify relevant publications of the vision and activities of the Institute, including openness to host, incubate, or test relevant innovative recovery techniques
  - iii. Activity: pursue federal research grant monies in partnership with regional land grant university
- 3. Goal: To **divert** regional food waste from the landfill.
  - a. Objective: Lease or purchase appropriate transfer/processing site.
  - b. Objective: Establish representative accounts.
    - i. Activity: partner with regional waste company (or)
    - ii. Activity: establish internal waste collection capacity
  - c. Objective: Service accounts.
    - i. Activity: contracts, invoicing, evaluation
    - ii. Activity: collection and hauling
    - iii. Activity: drop at facility
  - d. Objective: Process food waste according to coordinated recovery tracts.
  - e. Objective: Track all volumes into facility.
  - f. Objective: Track all volumes into respective recovery tracts.
  - g. Objective: Separate and track volumes of byproduct recyclables.

- 4. Goal: To create **jobs**.
  - a. Objective: Establish employment opportunities in management.
  - b. Objective: Establish employment opportunities in research.
  - c. Objective: Establish employment opportunities in data collection and administration.
  - d. Objective: Establish employment opportunities in sales.
  - e. Objective: Establish employment opportunities in technical waste management.

#### 4. Project Narrative:

Battle Creek, responsible for a disproportionately large percentage of the overall U.S. manufacturing economy, is home to both Kellogg Company and Kraft Food's Post Cereal Division. Still, it is a relatively small community of 50,000 and interfaces with its neighbors Marshall (population 7,000), Springfield (population 5,000), and Albion (population 8,500). Battle Creek is situated in rural Calhoun County, where the median household income is 20% below national average.

The Food Waste Solutions Committee aims to support USDA goals for national food waste reduction by promoting a plan for developing a Food Waste Solutions Institute based in Battle Creek that would enhance regional waste infrastructure, capture priority waste inventories, and serve communities both statewide and nationwide by aggregating knowledge and piloting innovative waste recovery technologies at small scale in a test market laboratory setting. The Institute would be developed at a contained cost and incorporate a level of cost recovery/revenue generation that would make radically reducing and recovering food waste achievable at a modest subsidy.

The Battle Creek area is a viable test market environment. All representative contributors to the food waste stream are present and with exception to a comprehensive food waste recovery mechanism the region contains all representative stakeholders inside the broader food system. Battle Creek is a manageable size and offers several identifiable isolated markets.

In addition to likely support from the major manufacturers, Battle Creek features the strategic partner presence of the International Food Protection Training Institute, Covance, and Battle Creek Unlimited. Because the food waste challenge is nationally visible and because Battle Creek offers comparative advantages in food science, test marketing and industry scaling, the City of Battle Creek and the Battle Creek Community Foundation support the regional placement and development of the Institute.

The concept is to establish a center and laboratory to generate and organize known best practices and to test the viability of a zero food waste community via study and coordinated recycling/recovery activities. The Institute will pursue the following upstream (reduction) and downstream (recovery) outcomes:

- Upstream:
  - o Clarify donation legal liability and best practices regarding handling logistics
  - Public relations campaign targeting individual purchasing and consumption patterns
  - o Explore potential "seconds" markets, such as the sale of imperfect produce
  - o Lobby for standardized labeling, starting with local manufacturers

- Lobby for comprehensive legislation addressing food waste
- o Restructure food donations to qualified charitable outlets
- Collect/track comprehensive regional data on food waste inventories

#### Downstream:

Implement and test a coordinated mix of scaled technologies, including:

- Small-scale point-of-use anaerobic digester, generation and storage of Renewable Natural Gases
- Small-scale in-vessel commercial onsite composting
- Transfer station for industrial, offsite composting
- o De-packaging and grinding mechanisms
- Livestock feeding (including nutrition and regulation analysis)
- o Explore residential collection and composting strategies

The Institute will promote/achieve the following USDA goals:

- 1. Food waste REDUCTION and RECOVERY throughout the food supply chain.
- 2. Enhanced donation/contributions of edible food to qualified organizations.
- 3. Economic development capability (jobs, revenue generation) and positive public relations benefits for regional communities.
- 4. Recapture/reuse of food waste for energy use or sale to grid, compost for growing medium, and generation of cost effective livestock feed.
- 5. Communications campaign to influence how organizations perceive and act relative to liability and logistics barriers to donation of surplus edible food.
- 6. Communications campaign to influence how individuals perceive and act relative to their own personal consumption and waste patterns.

It is important to note that a Food Waste Solutions Institute will be a notably valuable resource to rural communities and will target rural communities once operational. The relative access to and cost of foods (particularly healthy foods) in rural communities are prohibitive. Similarly, waste and recycling infrastructure is either distant and costly or hard to access, or close and either more expensive or less environmentally sustainable. As such, the Institute will be capable of testing and designing for appropriately scaled and strategically coordinated food waste models in rural America.

# 5. Work Plan:

Timeline: 12 months

1. Secure Year 1 funding: \$100,000

#### Month 1:

- 2. FWS Committee to form FWSI Board of Directors
- 3. Battle Creek Community Foundation to serve as Fiscal Sponsor
- 4. Board to formulate organizing and legal documents
- 5. Board to submit 501c3 application to IRS

#### Months 2-4:

- 6. Board to commission strategic planning session, loosely guided by this existing research, program design, and Year 2 and 3 budgets
- 7. Board to request funding from Battle Creek Unlimited, Michigan Department for Environmental Quality, USDA Rural Development, EPA Region 5, and

Michigan Economic Development Authority for specific elements of concept and strategic plan

8. Board to develop Director job description and launch search

#### Months 5-9:

- 9. Board to hire Director
- 10. Board and Director to generate siting criteria and launch site search
- 11. Director to secure and establish site according to strategic plan
- 12. Board and Director to pursue budget for Year 2 according to strategic plan
- 13. Evaluation of general achievement of work plan

## Months 10-12:

## 14. Operational implementation

#### 6. Budgets:

\* please see Appendix A for Budget Detail

Year 1: Start-up		
		Organization
		Leadership
		Strategic Planning
		Management
		Siting
		Fund Development
		Evaluation
TOTAL:	\$100,000	
T7 A T A		
Year 2: Infrastructure	1.00.000	
	\$100,000	Structure
	\$15,000	Utilities
	\$250,000	Vehicles
	\$100,000	Equipment
	\$465,000	Technology: low-end
	\$1,800,000	Technology: high-end
TOTAL:	\$930,000 - \$2,265,000	
Year 3: Operational		
	\$125,000	Operating/Administrative
	\$335,000	Human Resources
TOTAL:	\$460,000	

#### 7. Area(s) to be Served:

- Battle Creek, Michigan
- Calhoun County, Michigan
- Communities statewide (Michigan)
- Communities nationwide

#### 8. Summary of Experience:

The Food Waste Solutions Committee was formed in late 2015 to assess Battle Creek as a comprehensive test market laboratory for the reduction, capture, reuse/recycle or reconfigure of diverse community food waste inventories.

Its team members include:

George Franklin is a lawyer and former Vice President of Worldwide Government Relations for Kellogg Company. He has held numerous positions in and out of government including Member of the Industry Sector Advisory Committee and Consumer Goods of the U.S. Department of Commerce, Member of the U.S. Department of Agriculture Human Nutrition Advisory Committee, Chairman of both the State Affairs Committee and the Washington Representatives Group of the Grocery Manufacturers of America and Chairman of the American Frozen Food Institute.

Brenda Hunt received both her undergraduate and graduate degrees from Western Michigan University and has over twenty five years of experience in the non-profit sector. Brenda joined the Battle Creek Community Foundation in 1993 as the Program Officer. She was promoted to Vice President in 1995, to Chief Operating Officer in 1997 and began as President & CEO in April of 1998. She was honored by Western Michigan University, School of Public Affairs and Administration with the Dr. George James Award in recognition of innovative solutions to problems confronting the people of Michigan, and was inducted into the Outstanding Alumni Academy of the School of Public Affairs and Administration. She is a Fellow of Salzburg Seminar 406 in Salzburg, Austria, *The Role of NGO's in the Health of Communities: Creative Partnerships.* Brenda was awarded the Benjamin Franklin Award in 2001 by the Association of Fundraising Professionals, West Michigan Chapter and is the recipient of the Battle Creek Area Chamber of Commerce 2003 Athena Award and the 2004 Japan America Society of West Michigan Friendship Award. Brenda was recently awarded the 2010 Dale G. Griffin Healthcare Leadership Award.

Bill Schroer spent 15 years in brand management, profitably managing multiple brands at Stokely-Van Camp and Jeno's. At the Kellogg Company he established national distribution with Whitney's Yogurt. He started the WJSchroer Co. in 1987 and provides research and marketing consulting to largely non-profit and public sector organizations. Bill is the former Chair of the Downtown Partnership Advisory Committee and has served on multiple community non-profit boards of directors. Bill has a BA from the University of Wyoming and MBA from Western Michigan University. Bill served in the military as a Special Forces team leader and instructor at West Point. Bill was named Marketer of the Year for 1999 by the West Michigan Chapter of the American Marketing Association

**Brendan McCrann** has spent more than 10 years in and around the nonprofit sector managing programs spanning international development, urban agriculture, and food security. Brendan formed Future Pointe L3C in 2009 as a consulting and program incubation enterprise dedicated to sustainable food systems and integrated food waste solutions.

Under Brendan's leadership, Future Pointe has designed and managed market-oriented agricultural operations that intercepted community food waste and converted the waste into livestock feed and growing medium. Brendan has a BA from the University of Dayton and a Master of Nonprofit Management from Regis University.

## 9. Evaluation Method(s):

- o Board of Directors will evaluate Director according to strategic plan and job description.
- O Director will report monthly to Board and will evaluate self and staff according to strategic plan, job plans and job descriptions.
- o Institute will self-evaluate quarterly based on broad strategic plan and aggregated internal evaluations.
- o Office will be evaluated against specific data collection goals.
- Warehouse will be evaluated against specific operational standards.
- All testing will be evaluated against its design, execution, and intended application.

#### 10. Sustainability:

The vision and budget for the Institute will evolve based on learning in Years 1, 2, and 3. The Institute will require funding in Year 1 to organize appropriately and strategically and to set the operational direction for the organization pre-capitalization. The institute will require capitalization funding in Year 2 to secure and adequately build-out a site. The institute will require capitalization funding in Year 3 to commence simultaneous research and operation. Once fully operational, the Institute will generate revenue, though perhaps not enough to sustain itself. As such, the Director and Board of Directors must leverage Year 1 funding to prioritize broad, high-level strategic fund development for both capitalization and ongoing subsidy, where needed.

#### 11. Administrative Points:

While the development of a Food Waste Solutions Institute aligns with the Department's stated goals and funded initiatives pertaining to food waste reduction and recovery, it does not fit neatly into any one USDA program area. Battle Creek respectfully requests the Department's consideration in restructuring or establishing a funding mechanism which consolidates existing USDA priority for this issue and value for Battle Creek's approach, per the following sources and quotes:

#### USDA News Release No. 0257.15

• "Agriculture Secretary Tom Vilsack and Environmental Protection Agency Deputy Administrator Stan Meiburg announced the United States' first-ever national food waste reduction goal, calling for a 50-percent reduction by 2030. As part of the effort, the federal government will lead a new partnership with charitable organizations, faith-based organizations, the private sector and local, state and tribal governments to reduce food loss and waste in order to improve overall food security and conserve our nation's natural resources."

#### OCE Home/U.S. Food Waste Challenge/USDA's Activities

• "Through a Rural Utilities Service grant, USDA is funding the Rural Iowa Food Waste Reduction Project. This project will assist businesses in reducing food waste generation rates. Assistance will include on-site visits to determine food waste generation baselines; strategies for reducing food waste; siting for food waste capture systems; training in reduction strategies; and an exploration of local options for composting, biodigesting, donation of edible food, or commercial companies that offer organic waste diversion services. Through a Rural Utilities Service grant, USDA is also funding and the Food Waste Composting Education Program for Iowa Landfills. This program will promote food waste composting in rural counties, targeting both landfills and the general public through on-site technical training and regulatory assistance related to composting food waste. In addition, the project has created fact sheets, guides, regulatory summaries and videos. The main goal of the project is to reduce the amount of food waste discarded in Iowa landfills by assisting landfills and the general public in expanding or implementing composting operations."

#### The Technical Assistance and Training Grant Program

- "Directs technical assistance to the smallest communities with the lowest incomes"
- "Directs technical assistance that emphasizes energy and water efficient components to reduce costs and increase sustainability of rural systems"
- "for the purpose of increasing their (water/wastewater systems) their resiliency"
- "Educating water/wastewater systems on ways to promote innovative 21<sup>st</sup> century infrastructure that integrates natural systems into community development"

#### The SWM Grant Program

- "improve management of solid waste facilities, reduction of solid waste streams"
- "Work plans that establish composting programs and emphasize reducing food loss and waste in order to divert food waste from landfills, improve overall food security, and secure our nations natural resources."
- "Provide technical assistance or training to help communities reduce the amount of solid waste coming into a landfill."
- "This program helps small communities and utilities better manage solid waste disposal. Good practices can save tax dollars, improve the natural environment and may be necessary for manufacturers and other types of businesses to locate or expand operations."

#### Rural Business Development Grants

- "Promote sustainable economic development"
- "Enterprise type grant funds must be used on projects to benefit small and emerging businesses in rural areas"
- "Opportunity type grant funding must be used for projects in rural areas and they can be used for: community economic development, technology-based economic development, feasibility studies and business plans, leadership and entrepreneur training, rural business incubators, long-term business strategic planning"

#### Water and Waste Disposal Grants

- "Providing infrastructure for rural areas"
- "waste collection and treatment systems"

## **Economic Impact Initiative Grants**

- "essential community facilities"
- "Local Food Systems"

# Rural Economic Development Loan and Grant Program

• "Examples of eligible projects include: business incubators, community development assistance to nonprofits and public bodies (particularly job creation or enhancement), facilities and equipment for education and training for rural residents to facilitate economic development"

## Rural Community Development Initiative Grants

• "may be used for, but are not limited to: strategic plan development, accessing alternative funding sources, creating training tools"

#### 12. Available Upon Request:

- Budget narrative
- Budget justification (research)
- IRS Letter of Determination
- Board of Directors list, bios
- Financials

#### Appendix A: Budget Detail

Year 1: "Startup"

- 1. Organization
- 2. Leadership
- 3. Strategic Planning
- 4. Management
- 5. Siting
- 6. Fund Development
- 7. Evaluation

#### \$100,000

```
Year 2: Infrastructure/Capitalization (estimated/research-based, one-time expenses)
Structure:
       $45,000
                      6,000 sq.ft. structure: pole barn or Quonset hut
       $25,000
                      Construction: including internal offices
                      Concrete pad: avg. $5/sf: $30,000
       $30,000
                             Lease: 5,000 \text{ sq.ft.} warehouse: avg. $10/\text{sf/yr} = $50,000/\text{yr}
    $100,000
                      Total
Utilities:
       $2,500
                      Natural gas warehouse heater, installed
       $5,000
                      Ventilation, installed
       $2,500
                      3-phase power installation ($20/ft.)
       $5,000
                      Lighting, installed (estimate)
    $15,000
                      Total
Vehicles:
       $50,000
                      Used skid steer (attachments: bucket, skids): X2 backup
       $20,000
                      Forklift: used
       $130,000
                      Used packer truck: X2 backup
       $30,000
                      Used flatbed truck (w/ gooseneck): X2 backup
       $20,000
                      Sprinter van: used
    $250,000
                      Total
Equipment:
       $10,000
                      Baler, used, installed
       $25,000
                      Hopper Fed/Tub Grinder
       $2,000
                      5x 1cu.yd. bulk cube truck on casters ($400 ea)
       $12,000
                      30x 1cu.yd. collapsible plastic Gaylord pallet container ($400 ea)
       $600
                      150x 5gal buckets w/ screw lids ($4 ea)
  *Container costs for Representative Market Sample
    Grocery
       $5,800
                      4 accounts: 2x 8yd, 1x 6yd, 1x 2yd
    Restaurant
       $2,000
                      2 accounts: 2x 2yd
    Mass Feeder
       $7,200
                      2 accounts: 4x 8yd
```

Food Bank \$3,600

1 account: 2x 8yd

Manufacturer \$30,000 1 account: 2x 16 cu.yd. dump trailer, used Residential \$1,800 10 accounts: 20x 64gal toter \$100,000 Total Technology Composting \$100,000 In-Vessel System: 1,000 lbs./day \$75,000 Dehydrator/Accelerator: 1,000 lbs./day Digester \$365,000 Impact Bioenergy Digester: 1,000 lbs./day (trade-in value w/ upgrade) <OR> \$1.5M BioFerm Digester: 5,000 lbs./day Animal Feed \$25,000 Mobile manual processing facility \$200,000 De-packager/Grinder (Scott Equipment T-30): 50 cu.yd/day Lease: \$5,500/mo TBD**Total** 

# Total \$.5M-2M \*\$465,000 pre-technology, technology range \$765,000-\$1.9M

# Year 3: Operational and Human Resource Budgets (estimated/research-based ongoing expenses) Operational

Fuel \$10,000 Diesel \$5,000 LP/RNG Registration \$500 Department of Motor Vehicles \$1,000 Department of Transportation Insurance \$9,000 Commercial auto insurance \$12,000 Commercial GL insurance Maintenance \$25,000 Vehicle maintenance \$25,000 Equipment maintenance \$15,000 Technology technical support \$5,000 Building maintenance Utilities \$10,000 Electricity Water, wastewater treatment \$2,000 Tools \$500 Baling wire \$500 Grease \$500 **Batteries Technical** \$5,000 Unforeseen costs Total **\$125,000** 

<u>Human Resources</u>

Upper Management

\$55,000 Director (highly diversified skillset)

Middle Management

\$40,000 Accounts and Supervision (diversified skillset: transportation/warehouse)

Operational Staff

\$30,000 Driver and Skidsteer/Forklift Operator \$30,000 Driver and Skidsteer/Forklift Operator

\$30,000 Input/Output Controller and Technology Overseer \$30,000 Input/Output Controller and Technology Overseer

Technical

\$30,000 Vehicle and machine mechanic

Research

\$35,000 Researcher \$20,000 Research Intern

Administration

\$35,000 Data collection and storage, business administration

Total \$335,000

Total \$460,000