

Kent County, Michigan's Sustainable Business Park



**SOLID WASTE
MANAGEMENT
CONSULTANTS**

Presented by:
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Ohio By-Product Synergy Network
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- Over 40 years of experience leading solid waste management and renewable energy infrastructure projects in the environmental and energy services sectors
- Has worked with leading international energy companies and engineering/consulting firms and is experienced in:
 - Program and project management
 - Waste and energy marketing
 - Technology evaluations
 - Facility design, procurement, and construction






Presentation Agenda

- 1 – SBP Timeline & Status
- 2 - Overview of Proposals Received
- 3 – Incentivizing a Local Circular Economy
- 4 – Q&A



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Sustainable Business Park Timeline & Status



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Sustainable Business Park Update

2015

- GBB performs Operational Efficiency Study and Future Strategic Planning

2016

- Waste characterization study
- Opportunity to divert waste from landfill identified

May 2016

- "Reimagine Trash" Campaign Launched
- Circular Economy vision
- Goal: Reduce landfilled waste 20% by 2020 & 90% by 2030



November 2016

- "Strategy to Re-Imagine Trash" roadmap issued by DPW
- Key component is Sustainable Business Park

2020

20% by 2020 | 90% by 2030

2030

WHAT WE DO NOW

KENT COUNTY
DEPARTMENT OF PUBLIC WORKS
PROCESSES OVER
525,000 TONS
= 1 BILLION LBS
OF WASTE EACH YEAR

6% METAL

2% GLASS

13% PLASTIC

22% PAPER

23% OTHER

34% ORGANICS

ONLY 6-8% IS RECYCLED

WHAT WE COULD BE DOING

OUR GOAL: REDUCE LANDFILL WASTE 20% by 2020 | 90% by 2030

250-ACRE SUSTAINABLE BUSINESS PARK

REUSED

RECYCLED

CONVERTED

POTENTIAL USES

- COMPOST**
soil for farms
- WASTE CONVERSION**
plastic flake | aggregate
- REUSE & REPURPOSE**
salvage
- ENERGY RECOVERY**
biogas | electricity | fuel pellets | biofuels

Potential Public, Private and Nonprofit Partners of the Proposed Sustainable Business Park


MANUFACTURERS

AGRICULTURE

EDUCATION & RESEARCH

RECREATION & HEALTH



STARTUPS & ENTREPRENEURS




Site Plan

Instead of using these 200 acres for future landfill, County developing Sustainable Business Park that:

- Lays the **critical infrastructure** to support a regional circular economy
- Leverages **private sector development**
- **Attracts business** to localize the entire recycling or conversion process
- Preserves **open space**
- Expands **research**
- Generates and uses **renewable energy**
- Begins to **close the loop** in West Michigan



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Kent County SBP Master Plan Development

2017-18:
Process managed
by GBB-led
multi-disciplinary
team

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graph TD
    A[Stakeholder Meetings and Facility Tours] --> B[Existing Condition Analysis (Local A&E on team)]
    B --> C[Waste Stream and Market Analysis]
    C --> D[Funding Sources]
    D --> E[Technology Overview & Analysis]
    E --> F[Put out RFI and Evaluate Results of the RFI]
    F --> G[Conceptual Site Development Plan]
    G --> H[Conclusions & Recommendations]
            
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Stakeholder Meetings

Held November 2017 in Grand Rapids

Participants included:

- Business / Economic development
- Haulers
- Regional Manufacturers
- Municipal Officials
- Environmental Groups

Maintain engagement throughout process



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Facility Tours

County representatives visited several advanced waste processing facilities

San Jose, California in March 2018

- California leader in implementation of policies, programs & technologies promoting recovery/recycling of discarded materials and diversion of waste from disposal in landfills.

County team visited six material processing facilities

Facilities included publicly and privately-owned systems processing:

- Residential and commercial single stream recyclables
- Mixed MSW
- Yard waste
- Source separated organics
- Construction and demolition waste
- Product reuse center



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Approval of Master Plan



October 2018:
Formally approved by
County Board of
Public Works



September 26, 2018

Sustainable Business Park Master Plan
Kent County Department of Public Works

Submitted to:
Darwin Bass
Director
Kent County Department of Public Works
1500 Scribner Ave NW
Grand Rapids, Michigan 49504





Request for Business Proposals

June 2020



- RFP Issued

September 2020



- 7 Responses Received

Fall 2020

- Review / Evaluation currently underway

Overview of Proposals Received

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Mixed Waste Processing Proposals Received

Continuus Continuus Materials

 Envision

 RePower South

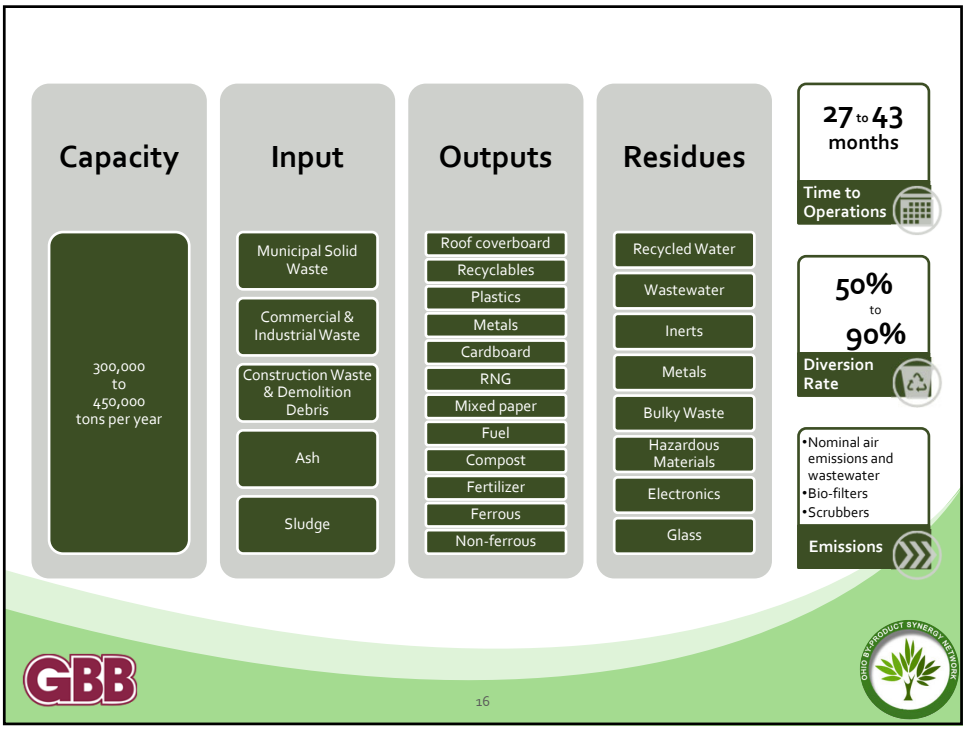
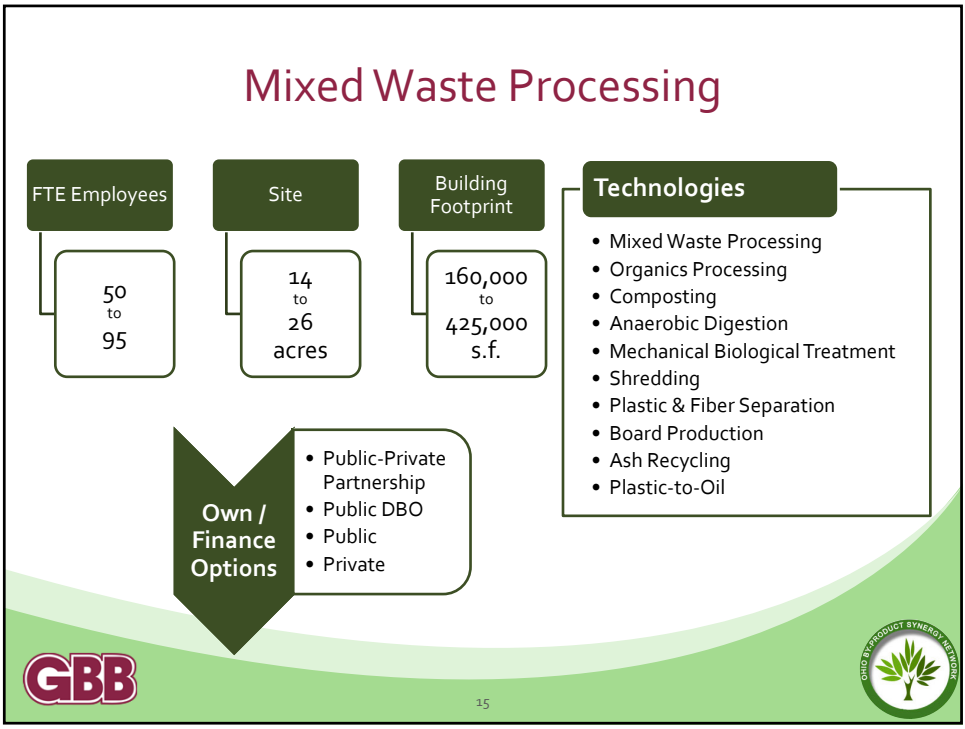
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Also
1 WTE
and
1 Fuel Pelletizing
Proposals





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Depiction of Outputs



Compost




Fuel Pellets



Roof Coverboard



Plastic



Glass



Renewable Natural Gas




Metals




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Incentivizing a Local Circular Economy



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- Develop a plan
- Engage all stakeholders
- Educate
- Perform a waste characterization study
- Streamline existing regulations & standards
- Identify & incentivize the waste hierarchy

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- Practice sustainable (and local) purchasing
- Regulate private sector production & consumption
- Create and leverage partnerships
- Invest in infrastructure and technology
- Use funding creatively
- Pilot new programs

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Summary Circular Economy To Do List

Public-Sector Entities

- Name vision and rally others for paradigm shift
- Secure points of influence (facilities or waste flows)
- Know waste stream
- Evaluate appropriate technology for community
- Find site
- Financial Incentives

Technology Developers

- Find partner communities ready for paradigm shift
- Know the biggest problem
- Seek joint proposals with manufacturing/end user partner to solve problem(s)



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Thank you!



1980-2020

*40 years
of Service*

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