

WE RECYCLE MORE.

RECYCLING ORGANICS FOR A ZERO CARBON WORLD



HUGHESENERGY



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Who We Are:

- Hughes Energy Group (HEG) sells, installs and maintains clean-technology systems invented by its sister company in the UK, the Wilson Biochemical Company (WBC)
- WBC is a UK company which is renowned for industrial steam process technology. It has deployed organics recycling technology for 20 years in Europe

What We Do:

- **We Recycle More** – our clean-tech solution recycles 20+ tons per hour of organic waste (food, paper, cardboard, agricultural wastes, other organics)
- **We Create Green Products** – we transform the organics we recycle into consumer products: recycled paper products; recycled plastics additives; organic carbon black; renewable biochemicals and biofuels

Climate Impact

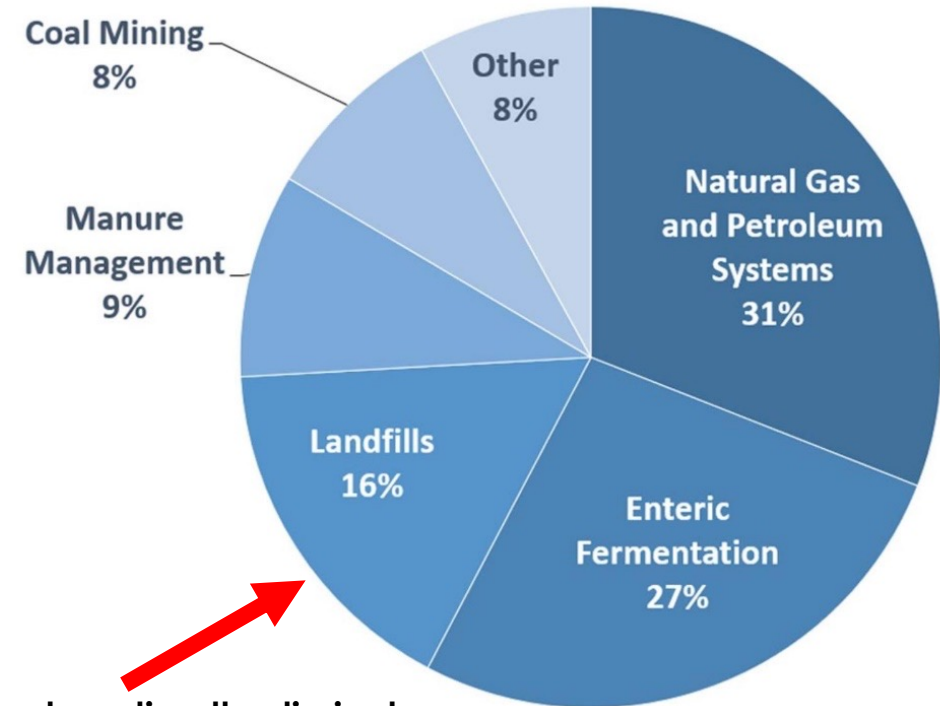


A seminal U.N. report published in May found that immediate reductions in methane emissions are the best, swiftest chance the planet has at slowing climate change. Landfills emit methane when organic wastes such as food scraps, wood and paper decompose.

— As reported by James Bruggers, NPR

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Sources of Methane Creation from Human Activity (Source: US EPA)



Our system directly eliminates

Impact of the Wilson System on Waste Stream

- All organic material is transformed into a high-sugar fiber
- Food waste is fully converted into fiber – whether source separated or in mixed waste
- All recyclable materials are sanitized and sterilized and out-sorted for recycling / reuse
- Reduce reliance on landfills. Remediate old landfills.

Wilson Fiber – our Product

- The steam autoclaving process composts all organics
- In UK, our fiber has been ruled by QC as a non-waste product
- **Repeatable, consistent, carbon-footprint reducing**



Recycling your organic material

The fibre produced from recycling organic material can be used to create second generation bio-products and bio-fuels for the circular economy.



Fiber is a raw material in the creation of sustainable bio-products and bio-fuels.



Fibre can be used to make recycled paper and plastics.



Pellets can be used as solid biofuel or to make biochar/carbon black



Feedstock for sustainable biofuel and platform chemical production

Consumer Products

Consumer Products

- Recycled Paper is stronger
- Plastics are stiffer with better heat deflection



Recycled Paper



Dried Wilson Fibre®



Carbon Black Products



Waste Characteristic by Month (Collapsed)



Waste Characterization – Available for Local Planning

Take **action** in our global fight against climate change

Eliminate METHANE

- Landfills are the third-largest source of human-related methane emissions in the United States.

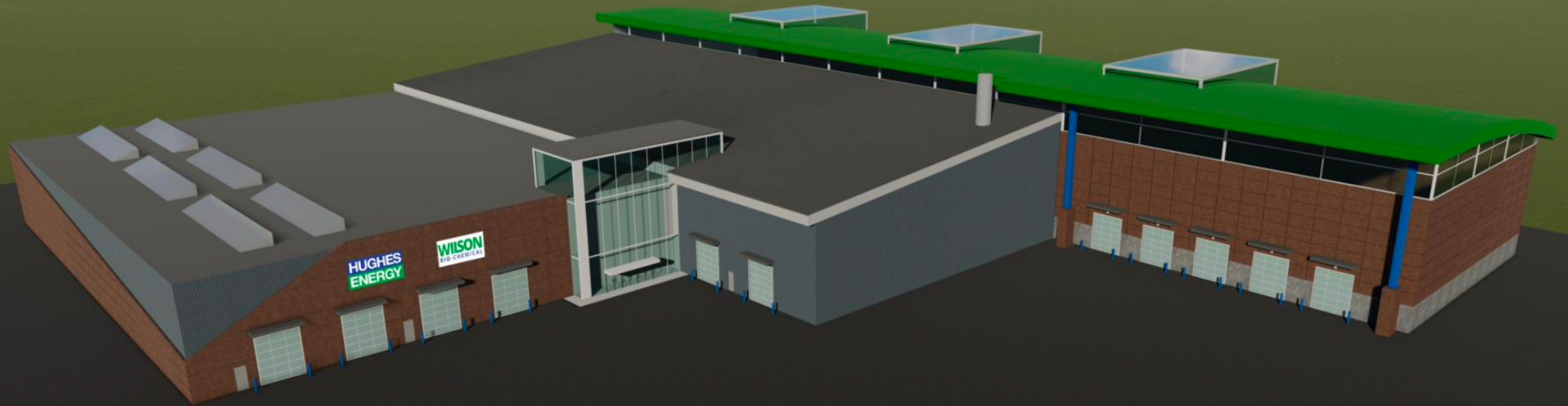
STOP Depleting Natural Resources

- End reliance on wood as a paper source
- Recycle what we are now putting into landfill.

REDUCE Greenhouse Gas Emissions

- Each Wilson System ® deployment diverts up to 200,000 tons of CO2 per year.





Hughes Energy Organic Recycling Facility



Office and Training Building

HEG Standard Infrastructure Requirements



Land: min 5 acres

Electrical: 1200 KW

Fuel: Natural gas Fuel

volume: 18,000 – 20,000 CFH

Water: Up to 1000 gph

Sewer Connection: Up to 1000 gph





Business Requirements to Proceed

- Strong local, County, State support
- Strong community involvement/interest
- Waste sources up to 500 tons per day (MSW, agricultural, dairy/meat processing residue)
- Location of offtake of fiber (paper preferred)

Community Benefits

- 50+ full time jobs (half professional / engineering) with training offered
- Training Center for additional HEG locations
- Ability for staff to transfer throughout the country
- Green Energy hub – conform with NYS Climate Leadership and Community Protection Act
- \$90M investment into the community
- Host community engagement: local scholarships, infrastructure, community benefits
- Visitors from around the world



HEG Actions/Timelines

Hughes Energy is developing a site in Delaware County, NY

- DEC permitting process underway, estimate 6 – 8 months completion

Financing Partners committed to first 5 sites

HEG now developing site 2. Shortlist of three (two in NYS, one in CT)

- Community engagement, site permissibility, technical suitability

Decision to be made within 60 days

Begin DEC Part 360 application process

Specific Actions Identified (ongoing)

Local Paper Makers:	Introductions and meetings
Waste Professionals:	Introductions and meetings
Transportation:	RR introductions and meetings
Sewer:	Price, process, timelines identified
Gas:	Price, process, timelines
Electrical:	Price, process, timelines
Community Engagement:	Identify Stakeholders and timelines for meetings

Suggested Next Steps (for discussion)

- Team: Establish a working group
- Technical: HEG team reviewing documents presented
- Visit: Expanded site visit by HEG team
- Leadership: Meet Town Supervisors and gain a formal commitment on steps
- Community: Outreach plan with initial meetings with key stakeholders
- Finance: Bring Investment Bankers into presentation in Community

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