



Mead
& Hunt



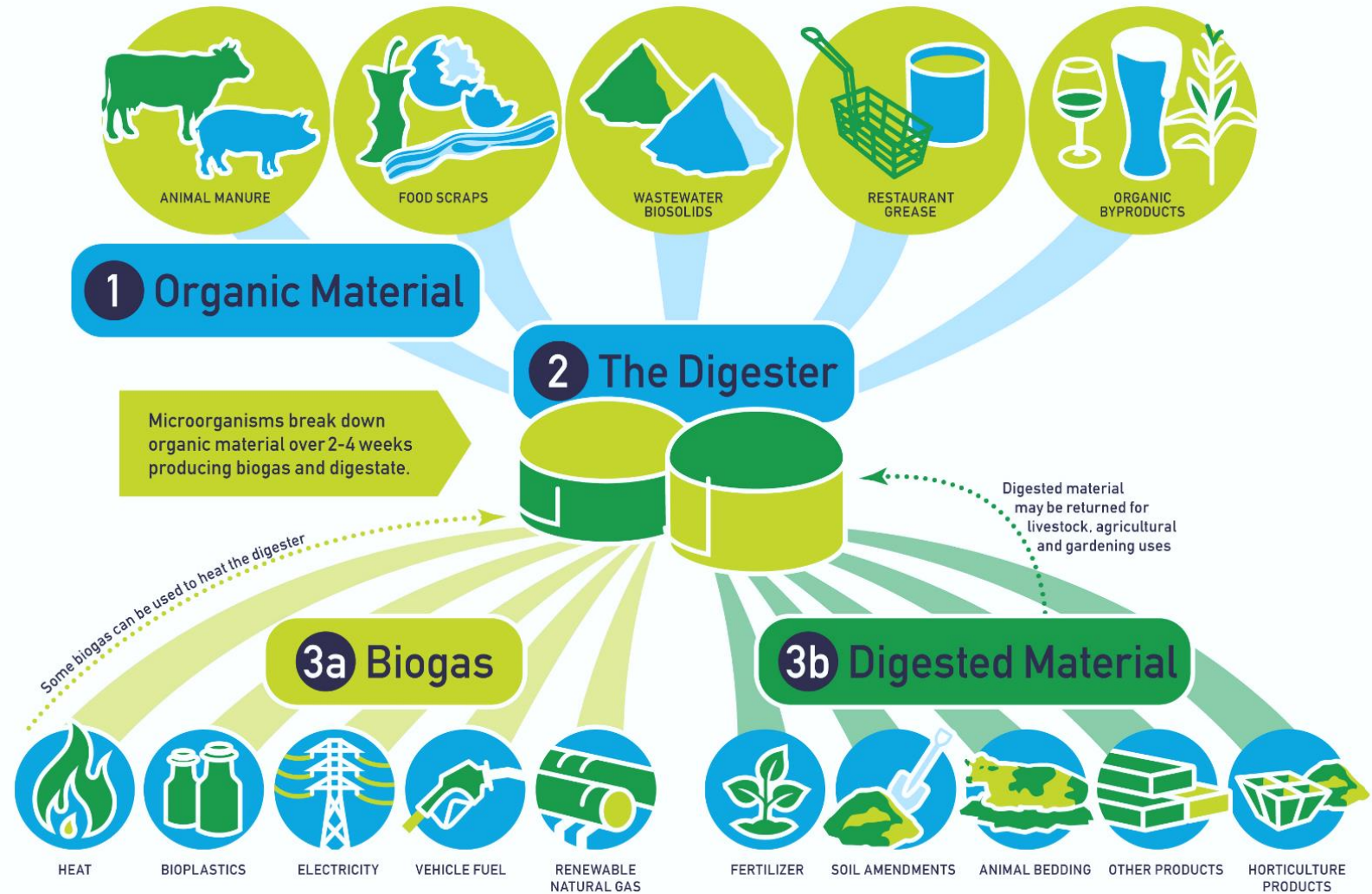
SYMBIONT
A Mead & Hunt Company

A Mutually Beneficial Relationship

Waste-to- Energy EPC for the Federal Government

July 2022

Waste to Energy with Anaerobic Digestion



Digester Expertise

20+ Beverage digesters

10+ Food digesters

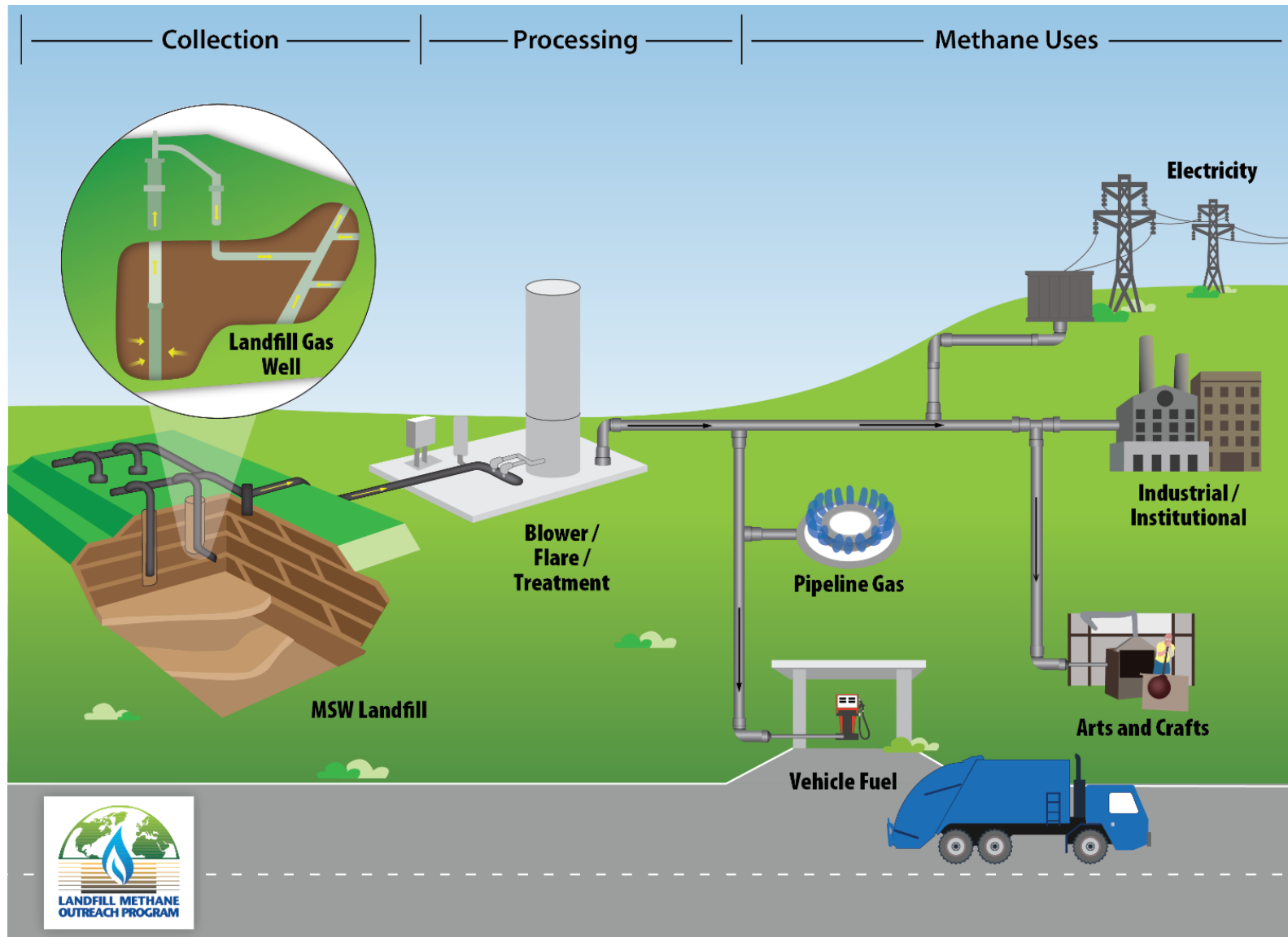
5+ Manure digesters

5+ Combined waste digesters

75+ Biogas projects



Waste to Energy with Landfills



Biogas Project Experience



95+

Projects in

35+

States



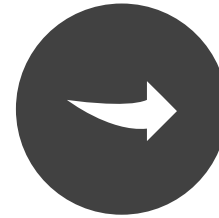
65+

Projects
with Landfills



245 MW

Produced



42,850+

SCFM
Biogas
Upgraded



+10,000

SCFM
Under
Construction



\$500

Million
Total
Installed
Cost

Biogas Upgrading Technology For Combined Heat & Power

- Full energy utilization boosting efficiency of biogas projects
- Capture heat for digester heating and other process heat needs
- Supplement electric needs or operate in full island mode during power outage



Making Natural Gas

- Agricultural
- Wastewater/Waste
- Landfill
- Industrial
- CNG Fuel
- Pipeline-quality natural gas
- Biogas Conveyance

Biogas Upgrading Technology For Renewable Natural Gas

Material of Construction	Biogas Range (SCFM)	Methane Yield	CapEx	OpEx
Membrane (3 Stage)	100 – 3,000	99% +	Low	Intermediate
Pressure Swing Adsorption (PSA)	300 – 2,600	98% +	Intermediate	Low
Amine Wash	700 +	99% +	High	Low
Water Wash	1,000 +	98% +	High	Low

3-Stage Membrane

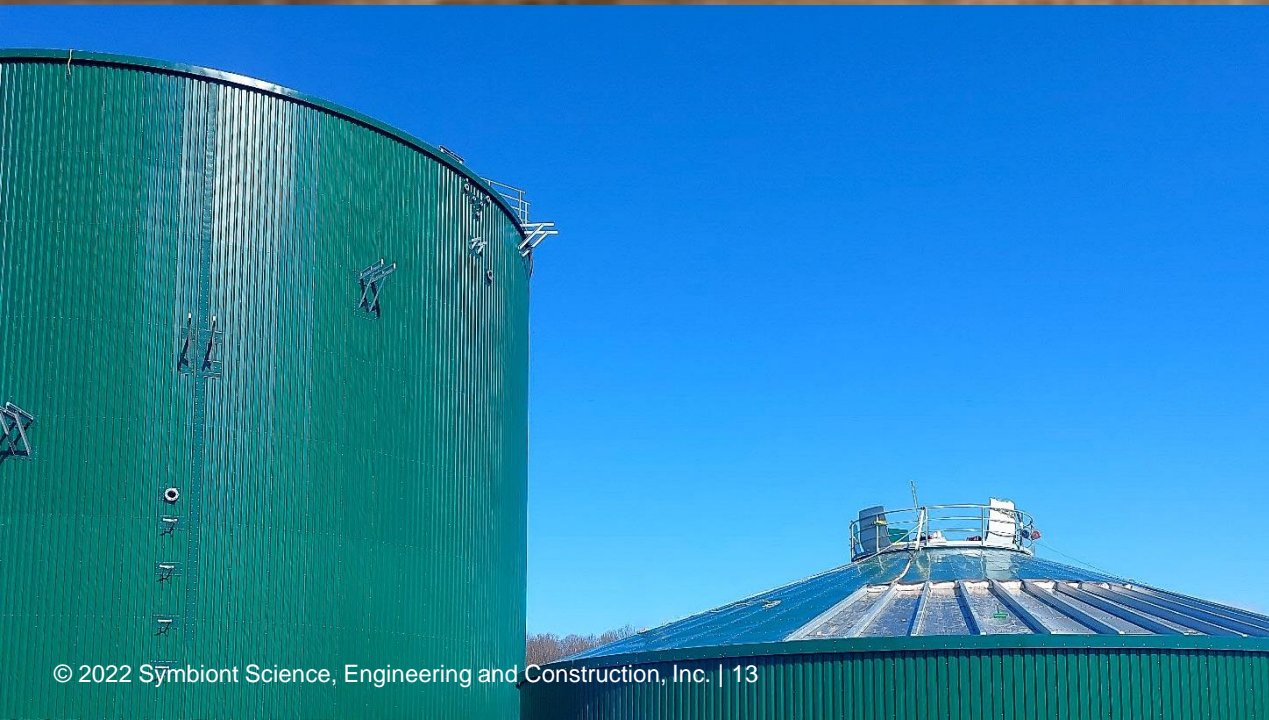


Pressure Swing Adsorption



Amine Upgrading

Water Wash Upgrading



Source Separated Organics

- Regional food waste to anaerobic digestion
- Convert source separated organics to biogas/RNG
- Material handling experience
- Overcome challenges related to fluctuating incoming COD or Loading
- Evaluate potential feedstocks

SEEPEX.
All Flow

Municipal Solid Waste Digestion (MSW)



Integrated
Biogas Alliance

- Alliance with world leading MSW digestion technology through Integrated Biogas Alliance

Green Waste Digestion

- High Solids Plug Flow Digester
- Landfill Diversion of Organic Fraction Municipal Solid Waste

WWTP Sludge to Compressed Natural Gas



- Trend away from WWTP to Resource Recovery Facilities
- Convert wastewater sludge to biogas/RNG/CNG
- Utilize existing infrastructure
- Integrate well with facility operations
- Potential to co-digest food waste



Our Questions



How is your waste being managed now?



What waste do you have available to you?



How is your energy being managed now? (Provider, already making your own?)



What are your renewable energy goals?