

Rutgers EcoComplex

“Clean Energy Innovation Center”

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Rutgers EcoComplex

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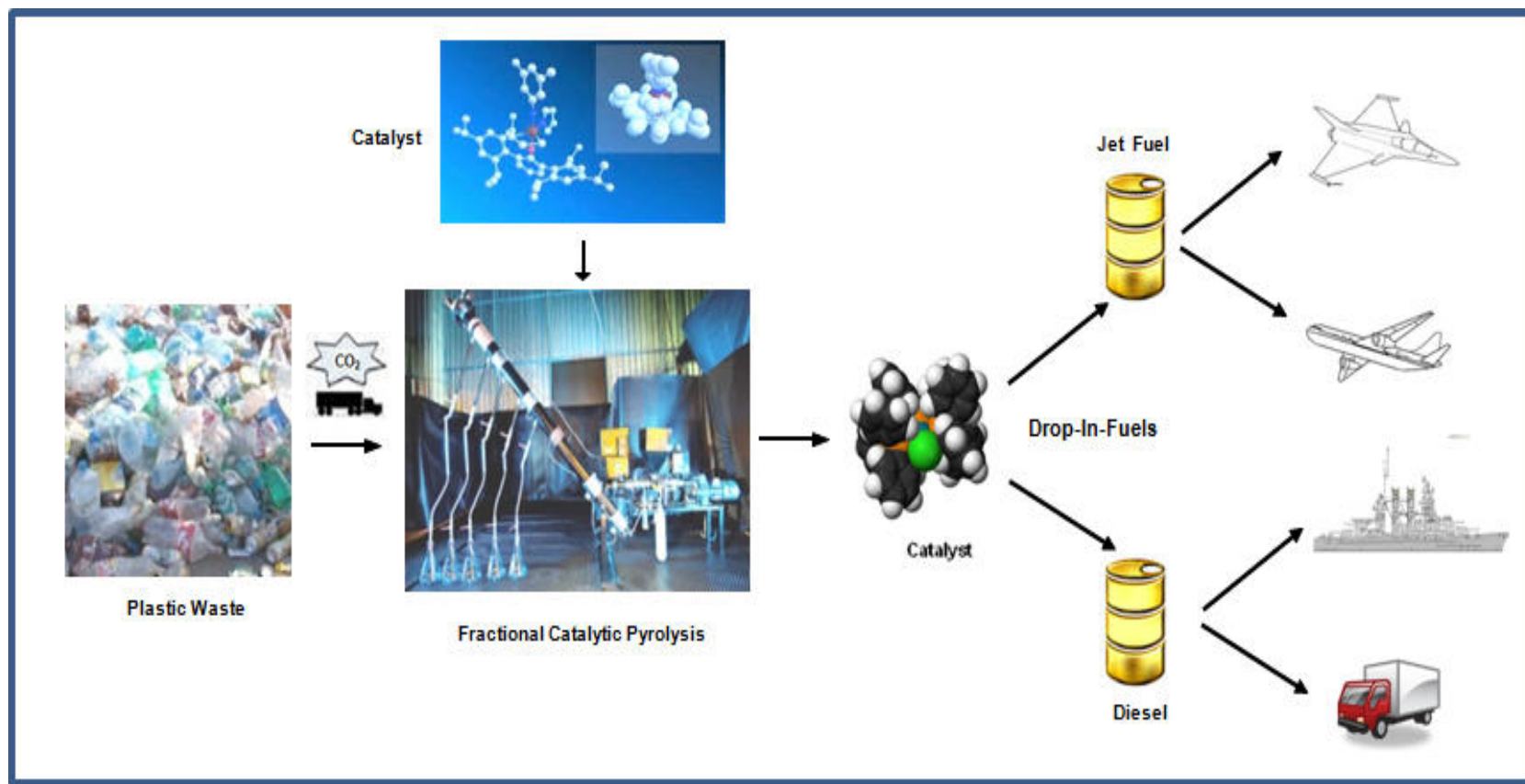
Burlington County Research and Demonstration Greenhouse



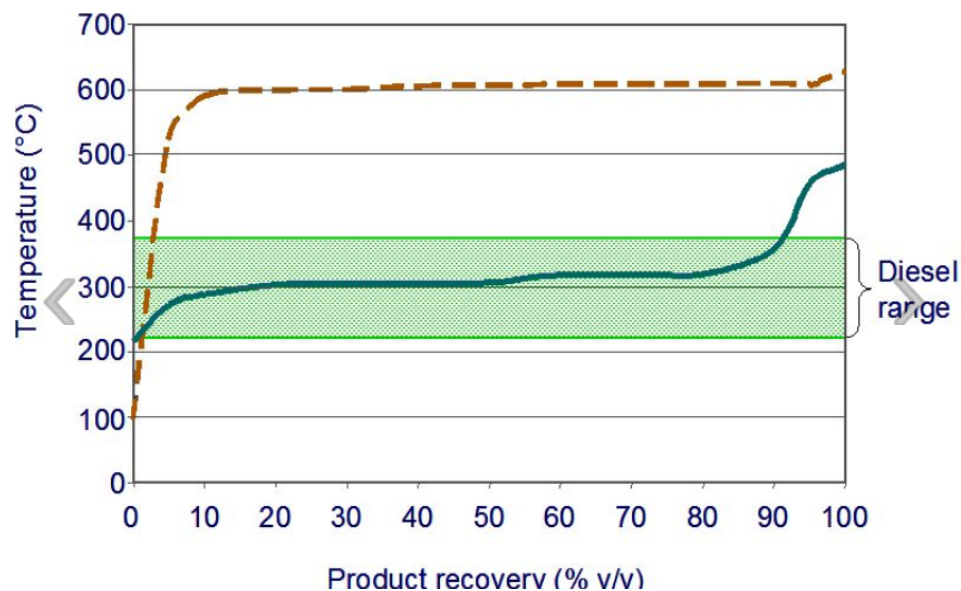
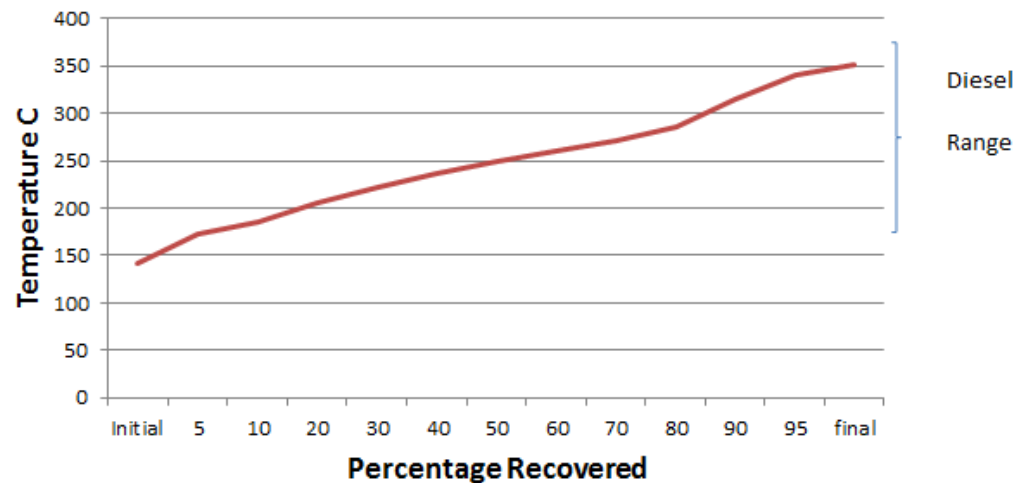
**Gaseous form siloxanes removal for
Landfill Gas-to-Power Generation**



Conceptual Overview of a Technology to be Demonstrated and Validated



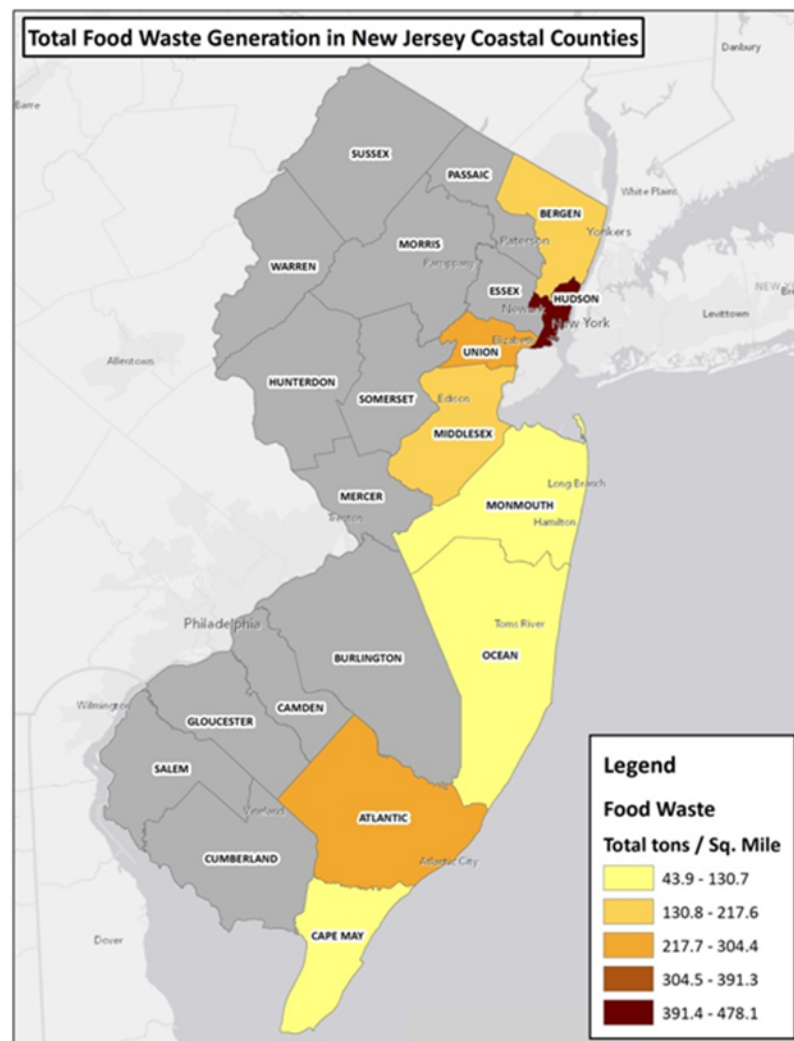
Distillation Curve: Modena 2.1 Sample 1



Food Assessment Study

Table 3: New Jersey Coastal Counties Institutional and Commercial Food Waste Generation

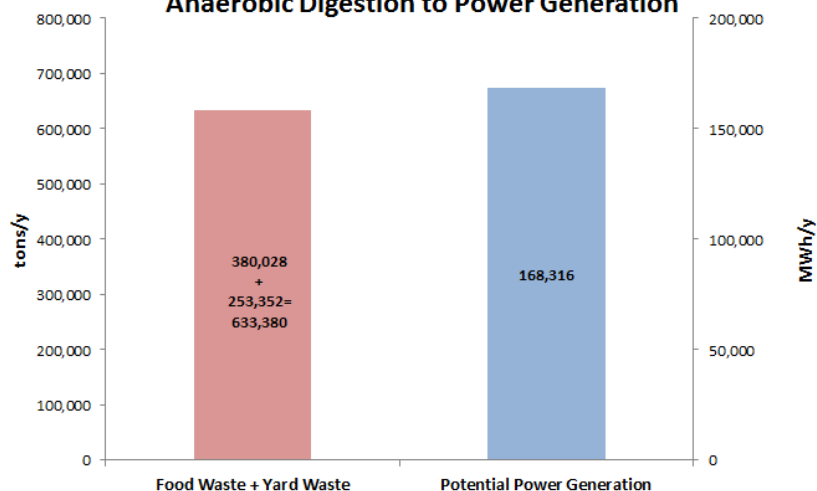
County	Food Waste tons/year
Atlantic	146,872.6
Bergen	41,327.4
Cape May	12,770.0
Hudson	24,636.7
Middlesex	52,406.6
Monmouth	44,155.0
Ocean	33,224.8
Union	24,635.0
Total	380, 028.0



If Coastal Counties C&I food waste & yard waste are utilized through AD for power generation, these counties can avoid 94,609 tons of CO₂ emissions per year.

	Total Food Waste & Yard Waste (60/40%) (tons/y)	Electricity Generation Potential (MWh /y)	Potential CO₂ Produced from food waste to power (tons/y)	Potential to reduce CO₂ (if the power displaces coal generated power) (tons/y)	GREET Comparison CO₂ amount (tons/y)
Scenario: Coastal Counties AD of C& I Food Waste & Yard Waste to Power Generation	633,380	168,315	94,746	189,355- 94,746 =<u>94,609</u>	-9,264

**NJ Coastal Counties C&I Food Waste
Anaerobic Digestion to Power Generation**



**NJ Coastal Counties C&I Food Waste AD Biogas
Power Generation
Potential CO₂ Reductions Comparison**

