



Renewable Energy Clean Air Project (RECAP)



Summary

Imagine the creation of a sustainable master-planned industrial park using energy produced from regionally harvested renewable resources of biomass and municipal solid wastes; business tenants producing “green” products that benefit the local rural economy; and employment increasing in the rural community. This is our long-term vision for the **Renewable Energy Clean Air Project (RECAP)**.

RECAP is to be located in International Falls, Koochiching County in northern Minnesota. Several other counties in the region will participate by providing municipal solid waste feedstock to the facility. The waste-to-energy solution will have a yearly operational volume of 36,000 tons (or 100 tons per day) of municipal solid waste. The facility generates on the conservative side 40 MMBtu/hr of synthetic gas that can be sold or used to produce approximately 40,000 lbs/hr of 150 psi steam for industrial use or to produce approximately 3-4 MW of electricity. Marketable solid by-products are produced so nothing goes to the landfill. The energy efficiency and modular nature of the waste-to-energy solution transitions nicely into combined heat and power applications for industrial parks.

Plasma gasification systems are environmentally clean. They work at extremely hot temperatures (hotter than the surface of the sun) in an oxygen deprived setting. This biomass renewable energy solution can significantly increase domestic energy production thereby decreasing our dependence on imported oil, and increase the nations recycling rate eliminating the need to landfill municipal solid waste. The process can be integrated within the existing waste management infrastructure.

CONTACT POINTS

Mike Hanson
Commissioner
Koochiching County
715 Fourth Street
International Falls,
MN 56649
888-203-6886

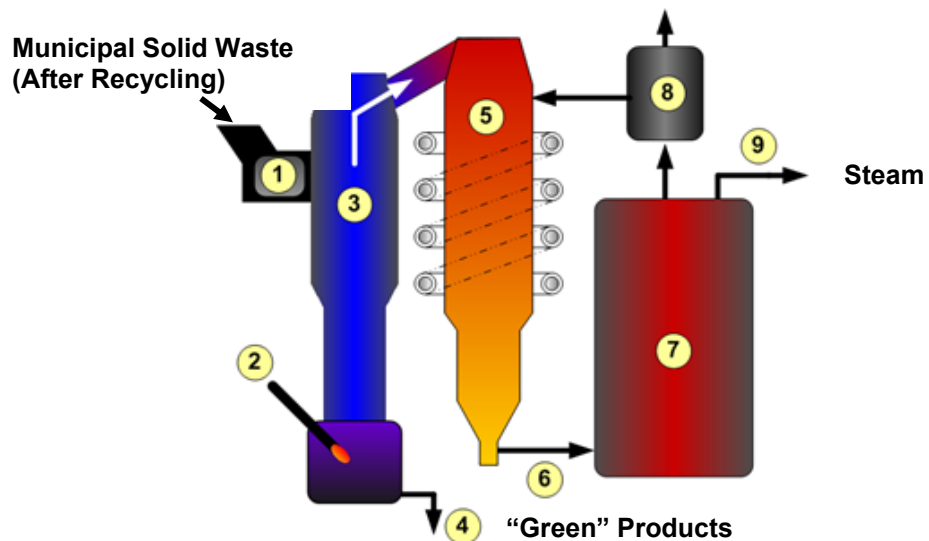
Shawn Mason
Mayor
International Falls
1019 Second Street
International Falls,
MN 56649
218-285-7411

Paul Nevanen
Director
Koochiching Economic
Development Authority
P.O. Box 138
International Falls,
MN 56629
218-283-8585

John D. Howard, III
Chief Technical Officer
Coronal, LLC.
P.O. Box 48747
Minneapolis, MN 55448
651-206-1565

Stephen W. Korstad
Chief Financial Officer
Coronal, LLC.
P.O. Box 48747
Minneapolis, MN 55448
651-765-0300

Paul Sandstrom
Coordinator
Laurentian RC&D
4850 Miller Trunk Hwy.
Duluth, MN 55811
218-720-5225



- 1 - Feed Stock Handler
- 2 - Plasma Torch
- 3 - Gasification Vessel

- 4 - Slag Tap
- 5 - Hot Syn-Gas
- 6 - Cooled Syn-Gas

- 7 - Boiler
- 8 - Filter
- 9 - High Pressure Steam

LAURENTIAN RC&D REQUIREMENT – EEO STATEMENT

All programs and assistance of the RC&D Council are available without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202)720-2600 (voice and TDD). To file a complaint of discrimination, write USDA Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue SW, Washington, DC 20250-9410, or call (202)720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.