

PROJECT DEVELOPMENT & BUSINESS CONSULTING SERVICES

BACKGROUND INFO

Klean Industries provides strategic planning and analysis necessary for project developers or resource owners to identify and evaluate their opportunities. Klean's has extensive experience in the energy markets specifically in the utilization of waste as a primary energy feedstock such as tires, plastics, municipal solid waste, and various other waste streams. This enables Klean to provide a range of consulting activities to meet the specific needs of various customers including the evaluation of energy project development opportunities.

CONSULTING SERVICES

Klean works with customers to identify their goals and objectives, a necessary step, to determine all suitable options. From this, Klean can develop various approaches for resource monetization through project development and ownership. Klean's specific experience in pyrolysis and gasification for thermal, power, and chemical applications, allows us to identify various pathways and project development opportunities for the customer to consider. Such options can then be evaluated by the owner against more passive approaches to sales of fuel or energy from projects owned by others.

Consulting services include the following:

- Strategic Planning & Analysis
- Market Assessment
- Critical Path Planning
- Resource Identification and Valuation
- Determination of Development and Revenue Options
 - Fuel Mining / Collection
 - Fuel Sales / Royalties
 - Energy Projects (own/operate vs. fuel sales to 3rd party owner/operator)
- Economic Modeling
- Business Plan Development

PROJECT DEVELOPMENT STUDIES

Once a customer has developed and refined his or her intention from the broader economic evaluation of the resources, Klean can provide targeted feasibility studies based on various project/plant configurations. Such work enables the customer to gain a deeper understanding of project specific economics, whether its generating and selling electricity or liquid fuels.

Deliverables include:

- Project Pro-Forma
- Defining Project Size and Unit Operations
- Budgetary Capital and O&M costs
- Preliminary Heat & Mass Balance (Process Flow Diagrams) with:
 - Fuel Feed Rates
 - Energy Output (syngas and/or steam)
 - Parasitic Loads
 - Overall Plant Efficiencies
- Identification of project financing options