



AgriPower

INCORPORATED

CONVERTING BIOMASS AND PLASTIC WASTE INTO CLEAN AND AFFORDABLE ENERGY

SUMMARY DESCRIPTION OF AGRIPOWER'S WASTE-TO-ENERGY, COMBINED HEAT AND POWER SYSTEM.

AgriPower, Inc. designs, manufactures, sells and services its unique, proprietary, modular and transportable Waste-to-Energy ("WTE"), Combined Heat and Power ("CHP") "Systems" that use "Biomass" (described below), plastic and other waste products as fuel to cleanly provide a reliable source of low cost electricity and Heat Energy suitable for "Co-Generation" (described below). Using well-established combustion and turbine technologies and various configurations of its Waste Heat Generators ("WHGs"), the Systems can continuously generate from 125 kW to 2.2 MW (gross) of on-site, base load power and considerable amounts of Heat Energy (>50 MMBtu/hr) in an environmentally friendly manner. The Heat Energy is suitable for heating buildings and producing hot water, steam and numerous, valuable "Co-Generation" applications such as air conditioning, refrigeration, water desalination and purification, making ice and other commercial uses such as heat bonding and drying various products such as paint and wood or excessively wet fuel. The Systems were designed to be fuelled by a wide variety of abundant, renewable and low cost wood, cardboard, paper, agricultural and animal waste materials including manure (i.e., "Biomass") with up to a 50% moisture content and many types of plastic waste. They were engineered to use readily available recurring customer waste thereby providing significant economies from avoided waste disposal fees and taxes, reduced costs of electricity and avoided natural gas and fuel oil purchases and from possible carbon credits, tax credits and "clean energy" grants. Their prefabricated, skid mounted design enables them to be easily transported to the fuel source, whether at the customer's on-grid premises, at remote, off-grid locations, or at disaster sites. The System was designed to be installed and fully operational in only 3 to 5 days and without the need for on-site technical personnel. They come in a wide range of sizes and outputs that can be custom configured for each customer's requirements. They are intended to be affordable to acquire, inexpensive and quiet to operate, highly reliable and efficient and easily transported to on-grid and off-grid remote locations. They are designed to operate continuously (i.e., 24/7) and safely and provide a low cost and reliable source of electricity and Heat Energy with minimal operator input, requiring only unskilled and inexpensive labor to prepare the fuel. Their uptime is expected to be >95% and at least 40,000 hours (5 years) between overhauls with minimal maintenance and a low Total Cost of Ownership ("TCO"). **Each System is expected to have a typical on-grid payback period of about 3 years before tax benefits. The off-grid payback period is projected to be less than 3 years before tax benefits from significant diesel fuel oil savings of approximately \$10 to \$15 million relative to a similarly sized diesel generator, over their expected respective 20+ year useful lives.**

The Systems have a wide variety of applications across multiple industries including municipal waste and landfill companies, supermarket chains, "Big Box" stores, malls and shopping centers, hospitals, hotels, casinos, colleges and universities (especially those with dormitories), prisons, food processors, greenhouses, paper and pulp companies, lumber mills, furniture manufacturers, farmers, ranchers, utility companies, government and charitable organizations, and at municipal buildings such as libraries, schools, town halls, etc.

The initial System is expected to be completed, in commercial operation (in the New York and New Jersey metropolitan area) and available for on-site working demonstrations in Q4 2012.

ADDITIONAL SYSTEM BENEFITS:

- They utilize a proprietary, technically superior, "multi-zone, variable temperature" combustion technology that can operate below the chemical reaction point thereby reducing pollution and enabling the use of more waste materials as fuel.
- Their "high temperature" WHG technology provides higher net power outputs and greater customer value than other systems.
- Their proven software enables maximum operating flexibility, continuous System optimization and constant emissions compliance.
- Their robust, fully automated, PC-based operating software module permits constant remote monitoring via telephone, satellite or the Internet.
- They use low air pressure and are non-condensing (i.e., they do not use water or steam in their operation).
- Numerous System and 50-Hz and 60-Hz configurations provide a wide range of electric and heat, hot water, steam and Co-Generation options. They have numerous on-grid and off-grid applications.
- They will usually be exempt from or comply with applicable U.S. and EU environmental permitting regulations.
- A large, worldwide service company will be available to handle installations and service.
- Systems can currently be delivered and operational in less than 6 months.
- Flexible sale, leasing and Power Purchase Agreement programs available.

Generators of usable waste streams will be able to utilize their own Biomass, plastic and other waste as a low cost fuel, thereby reducing their disposal costs and the expense of purchasing electricity, natural and propane gas and diesel fuel to generate their own electricity and Heat Energy. The Systems were designed and sized to be installed and operated where the Biomass is produced or stored, thereby eliminating fuel transport costs. In doing so, the Biomass can be used productively rather than being burned in the open air or decomposing and converting into methane gas. Methane gas is more than 21 times more harmful to the environment than carbon dioxide. Depending on the composition, density and moisture content of the fuel, the AG-375 System will require about 15 tons of fuel for each 24 hours of continuous use. Less suitable Biomass, such as leaves, paper and other low BTU materials, can be mixed with denser materials such as woodchips and cardboard and thereby used as fuel. **The Systems are intended to capitalize on and benefit from rising waste disposal, energy and fuel costs, growing environmental awareness and regulation, emerging “clean technology” incentives and increasing interest in achieving energy security and reliability from on-site energy production.**

TYPES OF FUEL.

The System can use most types of Biomass and many other waste materials as fuel, including:

- **Commercial Waste** including wood, woodchips, pellets and sawdust; construction, demolition and other debris (including plywood); wooden pallets; other wood waste including discarded furniture, crates and boxes; cardboard; paper; discarded fruits and vegetables; and many types of plastic including bottles, containers and pallets.
- **Agricultural Waste** including most types of crop waste such as sugar cane bagasse and oil palm waste; almond, coconut, nutmeg, peanut, pistachio, coffee bean and walnut shells; olive and peach pits; corn stover (stalks, cobs); nuisance plant materials such as invader and thorn bush; bark beetle-infected trees; rapidly growing renewable fuel crops including jatropha, poplars, willows and switchgrass; forest residuals including bark and brush; tree and vine trimmings and clippings; and most other types of agricultural and animal waste materials including many types of manure (from poultry, dairy cows, cattle and horses) and from municipal waste facilities. The availability and low cost of these fuels are especially well suited to **Governmental and Non-Governmental Organizations** for use at remote and off-grid villages, military bases, disaster sites, etc.
- **Municipal and Utility Waste** including tree waste and brush from municipal landfills, highway department and utility tree and tower trimming and gardening activities.

TYPES OF ON-GRID APPLICATIONS.

Typical on-grid applications include:

- **Producers of Biomass and plastic waste** will be able to use it as a low cost fuel instead of having to pay high disposal fees and taxes to have it brought to a landfill.
- **Reducing the expense of purchasing** electricity, natural or propane gas, fuel oil and diesel fuel where there is an abundance of inexpensive Biomass and plastic waste readily available for use as fuel.
- **Generators of usable waste streams** that are subject to increasingly restrictive and expensive environmental regulations that prohibit or penalize their transport of Biomass and plastic waste to a landfill or no longer allow it to be burned in the open air or to decompose and convert into harmful methane gas.

Many of AgriPower's intended customers plan on using the electricity and Heat Energy produced by their Systems in their own operations (i.e., “inside the fence”) as a significant source of secure and reliable on site power, heat, hot water and steam (or air conditioning or refrigeration), thereby substantially reducing their electricity and fuel costs, and some plan to sell their excess power to the local public utility and their excess Heat Energy (heat, hot water and steam) for use in nearby buildings. Others plan to charge nearby waste generators a disposal fee to accept their Biomass and plastic waste and then use it as fuel in their Systems.

TYPES OF REMOTE, OFF-GRID APPLICATIONS.

The Systems, which are prefabricated, modular and transportable, have been designed to provide a distributed power solution at remote (off-grid) locations where there is no or limited electricity, such as remote villages, military bases and disaster sites, or where electricity is “available” but it is expensive, “dirty” or unreliable. They will also be able to be used in place of or to complement other alternative energy technologies such as wind and solar that cannot produce electricity on a 24/7 basis or that are not always available such as hydroelectric power in drought conditions. When the electric grid is not available, the System will have to be linked to a substitute load-regulating mechanism such as a small diesel generator.

SIGNIFICANT FUEL, POWER AND HEAT SAVINGS: ATTRACTIVE PAYBACK PERIOD.

The Systems were designed to compete against purchased electricity, natural and propane gas and fuel oil and diesel fuel by inexpensively producing electricity and Heat Energy. They are intended to provide a waste disposal solution for generators of, or entities that have access to, a recurring supply of waste materials that can be used as a low cost fuel.

In contrast with readily available and low cost Biomass and plastic waste, diesel fuel oil is particularly expensive to obtain, transport and store, dirty to burn and its availability and price can be uncertain. Although an AgriPower System will initially sell for more than a comparably sized diesel generator, the cost difference is expected to be made up in significant fuel savings and Co-Generation benefits in less than 3 years of operation (before tax benefits). In most of the remote locations where diesel generators are used, the cost of diesel fuel oil today is between \$5 and \$8 (or more) per gallon. Accordingly, at today's fuel prices, the return on investment for the purchaser of an AG-375 System that replaces a comparably sized diesel generator is expected to be less than 3 years (after tax benefits). A customer that purchases a larger AgriPower System (they range in size up to 2.2 MW) or with an expanded Heat Energy capability (up to 50 MMBtu/h) should enjoy even greater fuel savings and a higher return on investment. **In comparison to a comparably sized diesel generator, an AG-375 System is expected to generate approximately \$10 to \$15 million in fuel savings over its expected useful life of 20+ years depending on the price of diesel fuel oil.** Similarly, an on-grid commercial enterprise that uses its Biomass and plastic waste as fuel in its System is expected to achieve savings in disposal costs, electricity and fuel purchases that pay for the System in about 3 years before tax benefits. In addition to their disposal, electricity, Heat Energy and fuel savings, AgriPower's customers are expected to receive additional economic value from the Systems' ability to enable the Heat Energy to be used for valuable Co-Generation applications. The Systems may also qualify for significant tax benefits (e.g., investment tax credits, carbon credits and renewable energy certificates), grants and other “clean energy” subsidies.

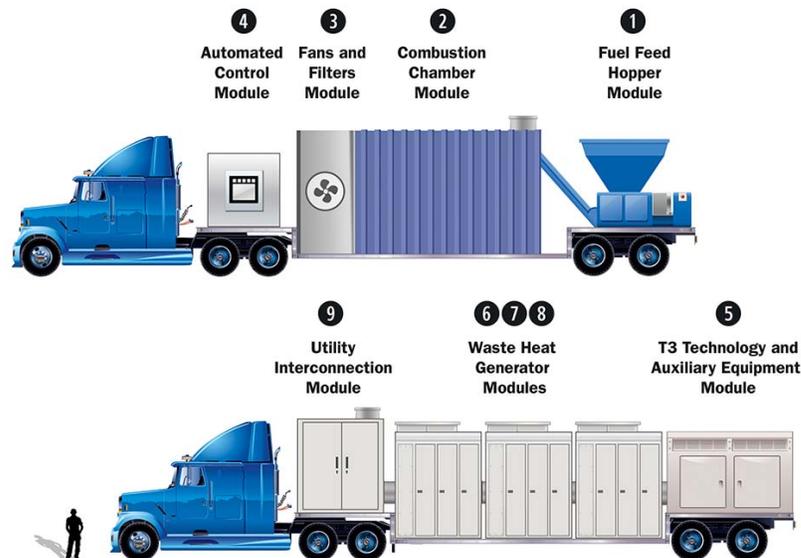
PROVEN TECHNOLOGIES; RELIABILITY; SYSTEM CONFIGURATIONS.

The Systems have been specifically designed to use commercially available, high quality components produced for AgriPower by established contract manufacturers. The underlying technologies that form the core of the Systems are well proven and have been in use for more than 40 years. Production of the initial System is currently underway and it is expected to be completed, in commercial operation and available for demonstrations in the fourth quarter of 2012. AgriPower currently offers Systems with between one and six Waste Heat Generators that have gross power ratings (and net outputs) of 125 kW (120 kW), 250 kW (240 kW), 375 kW (360 kW), 500 kW (480 kW), 625 kW (600 kW) and 750 kW (720 kW) and plans to introduce even larger Systems (up to 2.2 MW) in 2013. The foregoing net outputs are before the approximately 20 kW parasitic load each System requires to operate its computer, fans, blowers, motors, etc. In addition to the Heat Energy required to operate the Waste Heat Generators and produce the electricity, each of the Systems will be able to be custom configured to provide substantial amounts of additional Heat Energy for heating, hot water and steam purposes and for Co-Generation applications, thereby increasing their efficiency, suitability and economic benefits. Efficiency ratios are expected to be 60%+ to 80%+ depending on the application.

EASE OF TRANSPORT; RAPID ASSEMBLY AND INSTALLATION; FLEXIBILITY OF OPERATION.

Each System module was designed to be skid mounted and contains quick connect fittings making the entire System easy to handle, ship and transport. This enables them to be placed on trailers and easily brought to where they are needed, removed from the trailers and quickly placed into service, utilized for as long as necessary (typically, until all of the wood waste is used as fuel) and then easily decommissioned, remounted and re-deployed to other sites. For example, the Systems can be brought to disaster sites and used to dispose of the enormous amounts of waste wood from damaged houses and trees. This avoids overwhelming the local landfills with otherwise usable wood waste and provides, for emergency use, on-site power and Heat Energy for Co-Generation that can be used for heating, air conditioning and refrigeration purposes, to purify and heat water and make ice.

AGRIPOWER'S MODULAR, TRANSPORTABLE SYSTEM



This graphic shows the complete AG-375 System mounted on two tractor trailer chassis (that are not included). Depending on its size and configuration, the complete AgriPower System will usually be transported on two trailers. The first trailer will usually contain: (1) the Fuel Feed Hopper Module; (2) the Combustion Chamber Module; (3) the Fans and Filters Module; and (4) the Automated Control Module. A second trailer will usually contain: (5) the Auxiliary Equipment Module; (6) Waste Heat Generator Module #1; (7) Waste Heat Generator Module #2; (8) Waste Heat Generator Module #3; and (9) AgriPower's proprietary T3 Technology Module (it stands for Thermal Treatment and Transfer) and Utility Interconnection Module. The Systems were designed to be easily transported to their sites on trailers and engineered to be quickly installed and placed in operation in only 3 to 5 days (depending on crew size and System configuration). They can be operated on an inexpensive and easily prepared cement or gravel lay down pad. When and if necessary, they can be quickly dismantled and re-located. **Prefabrication, modularity, ease of transport and rapid set-up, decommissioning and redeployment times are significant benefits of the System.**

PRODUCT BENEFITS.

The Systems provide numerous significant economic and other benefits to AgriPower's customers:

- ✓ **ABILITY TO USE LOW COST FUEL:** The Systems can use a wide variety of readily available and inexpensive Biomass and many types of plastic waste as fuel.
- ✓ **COMBINED HEAT AND POWER TECHNOLOGY:** The unique design of the System enables the Heat Energy generated from its operation to be reused to provide virtually free heat, hot water and air conditioning to commercial buildings and greenhouses thereby increasing the number of System applications and their economic benefits. Customers (such as hospitals, universities, prisons, hotels and casinos) that require large amounts of hot water (for their kitchens, laundries, room showers and heated swimming pools) can also obtain an upsized combustion chamber to provide their facilities with additional heat, hot water and/or steam and thereby reduce the significant amount of electricity and natural gas and fuel oil they purchase for these purposes.
- ✓ **CO-GENERATION BENEFITS:** The Heat Energy produced by the System is available as an additional and free energy source for Co-Generation applications to operate desalination and water purification equipment, ice machines and refrigeration units; and heat for commercial processes such as heat bonding and for drying paint and wood (or very wet fuel).

✓ **SIGNIFICANT WASTE DISPOSAL AND FUEL COST SAVINGS:** Using Biomass and plastic waste for fuel provides considerable savings from avoided waste disposal fees and taxes and also produces dramatic fuel cost savings compared to using diesel fuel oil. Fuel savings from the AG-375 System are expected to provide a financial payback period of about 3 years for an on-grid application and less than 3 years for an off-grid application (and even less time with the larger Systems). Fuel savings for an off-grid location using diesel fuel oil are estimated to be \$10 to \$15 million over a System's expected useful life of 20+ years, compared to a comparably sized diesel generator set, depending on the future cost of diesel fuel oil.

✓ **ENVIRONMENTALLY FRIENDLY; QUIET OPERATION:** The System was engineered to be environmentally friendly and comply with applicable U.S. and EU permitting and zoning regulations when used with most types of Biomass as fuel. Even contaminated materials (e.g., construction and demolition materials such as plywood) may be used for fuel after adding optional emissions control equipment that will capture the contaminants (e.g., paint and glue) during the combustion process. The System was designed to be extremely quiet; at a distance of 5', its noise level is less than that of a telephone's dial tone.

✓ **EASE OF TRANSPORT; REDUCED FUEL TRANSPORT COSTS; RAPID ASSEMBLY AND INSTALLATION; SMALL FOOTPRINT:** The Systems are prefabricated, modular, skid mounted and able to be shipped in or as standard 20' or 40' shipping containers, making them easily transportable to where the fuel is located, even in highly remote areas (thereby reducing or eliminating fuel transport costs). They contain quick connect fittings so they can be installed and commissioned with minimal on-site construction requirements. The installation, set-up and tear-down time will only be 3 to 5 days. When all of the modules are assembled, the AG-375 System will measure about 40' long, 8' wide and 12' high and weigh about 80,000 pounds (40 tons). The fuel preparation and storage area, which will vary depending on each customer's needs, could require an additional 20' x 40' area. The System should be installed and operated inside of a suitable enclosure on an inexpensive cement or gravel lay down pad.

✓ **EASE OF USE; FULLY AUTOMATED OPERATION:** The System has been designed to be easily and safely used in less developed countries by unskilled and inexpensive labor and be extremely user-friendly. It was engineered to be fully automated and operate continuously (i.e., 24/7) to produce base power and Heat Energy without the need for on-site technical personnel and can be remotely monitored by AgriPower or the customer via telephone, satellite or the Internet.

✓ **PROVEN TECHNOLOGIES; RELIABILITY; LOW OPERATING COSTS:** The Systems rely on proven "multi-zone, variable temperature" combustion and "high temperature" Waste Heat Generator technologies that have been in use for more than 40 years. The reliability of these proven technologies will translate into low operating and maintenance costs and very high uptime periods (95%+). Their uptime is expected to be at least 40,000 hours (5 years) between overhauls.

✓ **HIGH ELECTRICAL AND HEAT OUTPUT; HIGH (60%+ to 80%+) EFFICIENCY:** The Systems were designed to produce high electrical and Heat Energy output for their size and weight. They are expected to be extremely efficient and provide about 3 to 4 BTUs of electricity and Heat Energy for every 5 BTUs of fuel used, through the use of Combined Heat and Power technology and the customers' use of low-grade heat for pre-heating water or heating buildings or greenhouses.

✓ **TECHNICAL SUPERIORITY:** Comparably sized Biomass-fueled units that utilize water, steam, gasification or high air pressure technologies are inferior to AgriPower's unique Systems. Steam units usually require difficult and expensive to obtain ultra-pure water to operate and may require around the clock engineers to assure the safety of high-pressure vessels and to prevent corrosion. The AgriPower Systems are non-condensing and will not use any water, steam or high air pressure to operate (although an optional hot water heater may be added for heating and hot water and steam purposes). In gasification units, turbine blades become coated with the contaminants of combustion, resulting in expensive and continuing maintenance and downtime problems. By contrast, AgriPower's fully sealed Waste Heat Generators do not come into contact with, or become damaged by, contaminants. Diesel generators require the purchase, transport and storage of highly polluting and increasingly expensive and unreliable to obtain diesel fuel oil.

✓ **SYSTEM FLEXIBILITY:** The combustors used by AgriPower have several significant advantages compared to other technologies in the market. For example, AgriPower's combustor can efficiently operate within a stable range of temperatures from 1,000°F to 2,200°F. Many emissions problems arise because of chemical reactions that frequently occur in the 1,600°F to 1,800°F range. The AgriPower combustor's ability to operate below the chemical reaction point enables it to operate cleanly using a wide variety of waste materials as fuel and without expensive emission control equipment being necessary.

SUMMARY AND CONCLUSION.

AgriPower provides a product line of Biomass and plastic fuelled, reliable, affordable, environmentally friendly and transportable electric power and Heat Energy Systems for numerous on-grid and off-grid applications. The various sized Systems can supply a much needed Waste-to-Energy, Combined Heat and Power solution by making it possible to use various types of Biomass and many types of plastic waste as a low cost fuel to generate inexpensive electricity and Heat Energy suitable for many valuable Co-Generation applications. The Systems will be especially attractive to enterprises that pay to dispose of their Biomass and plastic waste, that pay high costs for electricity or fuel to produce heat, hot water or steam or that must purchase diesel fuel oil to use in their diesel generator sets. AgriPower's Systems should pay for themselves in about 3 years.

Interested parties, including prospective customers, independent sales representatives, distributors and dealers, are invited to visit AgriPower's website to obtain additional information: www.agripower.com. Visits to AgriPower's facility and demonstrations of the System in commercial operation can also be arranged later in 2012.

FOR FURTHER INFORMATION, PLEASE CONTACT:

AGRIPOWER, INC.

BARRY J. BERMAN, CHIEF EXECUTIVE OFFICER

46 DEEPALE DRIVE, GREAT NECK, NEW YORK 11021 USA

OFFICE: (516) 829-2000 • MOBILE: (516) 384-2100 • FAX: (516) 487-3163

E-MAIL: BBERMAN@AGRIPOWER.COM • OR VISIT OUR WEB SITE: WWW.AGRIPOWER.COM