



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. ("**AgriPower**") is about to commence manufacturing, selling and servicing its proprietary, modular and transportable Waste-to-Energy ("**WtE**"), Combined Heat and Power ("**CHP**") systems (the "**Systems**") that were specifically engineered to provide a reliable on-site source of low cost electricity and Heat Energy suitable for "Co-Generation" (described below). The Systems will use "Biomass" (described below) and plastic waste materials as fuel and well-established combustion and turbine technologies to continuously generate from 130kW to 780kW (gross) of base load power and up to 50MMBTU/hr of additional Heat Energy in an environmentally friendly manner. The Heat Energy will be available for "**Co-Generation**" which has many valuable applications such as heating and air conditioning buildings; for producing hot water; for refrigeration; for desalinating and purifying water and making ice; and for commercial processes such as heat bonding and drying various products such as paint and wood or excessively wet fuel (above 50% moisture content). The Systems will come in a wide range of sizes and outputs that can be custom configured for the customer's requirements. They were designed to use readily available, recurring customer and/or agricultural waste, thereby providing additional economies from avoided disposal fees and taxes as well as from carbon credits, tax credits and "clean energy" grants. **Each System is expected to have a typical on-grid payback period of about 3 years before tax benefits and about 26 months after tax benefits. The off-grid payback period is projected to be less than 3 years before tax benefits and less than 2 years after 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 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**") and many types of plastic waste with up to a 50% moisture content. They are intended to be affordable to acquire, inexpensive to operate, highly efficient and easily transported to on-grid and off-grid remote locations. They were engineered to operate continuously (i.e., 24/7) with minimal operator input and easily and safely used by unskilled and inexpensive labor. Additional benefits are they will use low air pressure and be non-condensing (i.e., they will not use water or steam in their operation) and will usually be exempt from or comply with applicable U.S. and EU environmental permitting regulations. They will utilize a proprietary, technically superior, "high temperature", "clean air" design and will include a robust, fully automated, PC-based operating software module that will permit constant remote monitoring via telephone, satellite or the Internet. Their unique prefabricated, modular and transportable design will enable them to be easily transported to the fuel source, whether at the customer's 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. The Systems will have a wide variety of applications across multiple industries including municipal waste and landfill companies, malls and shopping centers, supermarket chains, "Big Box" stores, paper and pulp companies, farmers, ranchers, lumber mills, energy and utility companies, hospitals, hotels, schools, universities, prisons, food processors, greenhouses, casinos, paper and pulp mills, furniture manufacturers, municipal buildings, etc.

Generators of usable waste streams will be able to utilize their own Biomass and plastic waste as a low cost fuel, thereby reducing their disposal costs and the expense of purchasing electricity, natural 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-390 System will combust 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 and emerging "clean technology" incentives.**

TYPES OF FUEL.

The System has been designed to 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; 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 for use as fuel in hospitals, libraries, schools, town halls and other municipal buildings.

TYPES OF ON-GRID APPLICATIONS.

Typical on-grid applications will 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 gas and diesel fuel oil 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.

Most 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 on site power, heat and hot water (or air conditioning or refrigeration), thereby substantially reducing their electricity, natural gas and diesel fuel oil bills, and some plan to sell their excess electricity to the local public utility and their excess Heat Energy (heat and hot water) 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 or unreliable. They will also be able to be used in place of or to complement other, more expensive 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 gas and diesel fuel oil by producing electricity and Heat Energy inexpensively. 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-390 System that replaces a comparably sized diesel generator is expected to be about 2 years (after tax benefits). A purchaser that selects a larger AgriPower System (they range in size up to 780kW) or with an expanded Heat Energy capability should enjoy even greater fuel savings and a higher return on investment. **In comparison to a comparably sized diesel generator, an AG-390 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 (e.g., broken plastic and wooden pallets, cardboard, paper, and discarded fruits and vegetables) as fuel in its System is expected to achieve savings in disposal costs, electricity and natural gas purchases that pay for the System in about 3 years before tax benefits and about 26 months after 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.

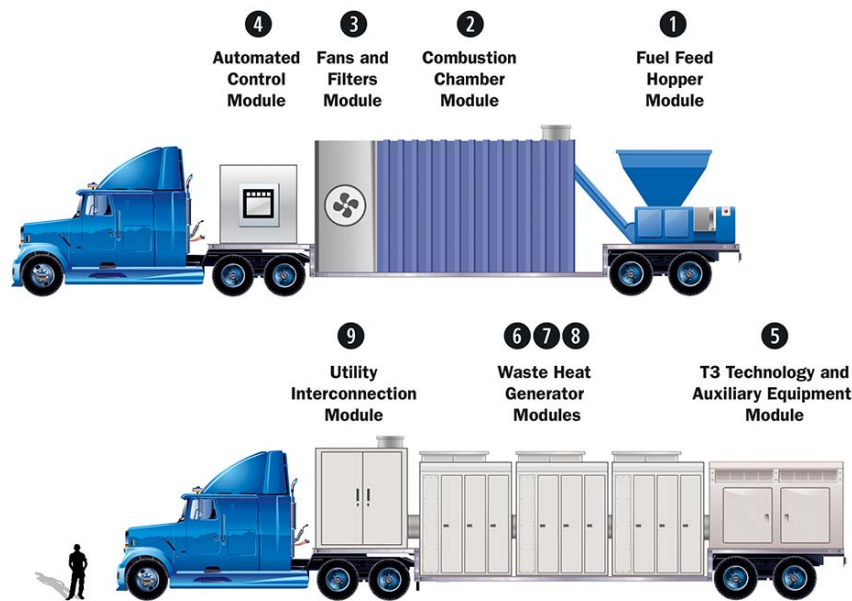
AgriPower's first generation System was an 80kW proof of concept test unit. It was operated at an Oregon lumber mill using wood chips as fuel. A test program was conducted over a one-year period in a wide range of operating conditions. Additional testing of gas flows and heat transfer dynamics was conducted at Solar Turbine, Inc.'s Research and Development facility in San Diego, California over a period of several months. Solar is a wholly owned subsidiary of Caterpillar, Inc. The results of the testing program confirmed the 80kW System's basic design concept and overall performance. It was from this initial test program that a second-generation 250kW System evolved. Based on its initial test results, a design improvement program was developed and implemented and a test program of the 250kW System using Biomass as fuel was conducted over a several year period. A final design program was completed in mid-2011 and our contract manufacturers were then identified and selected in late 2011. The redesigned Systems have been specifically designed to use modified, commercially available, high quality components produced for

AgriPower by established contract manufacturers. The underlying technologies that form the core of the AgriPower 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 and operational in March, 2012 with demonstrations scheduled to commence shortly thereafter. Proof of concept having been established, AgriPower currently plans to offer Systems with between one and six Waste Heat Generators that will have gross power ratings (and net outputs) of 130kW (120kW), 260kW (240kW), 390kW (360kW), 520kW (480kW), 650kW (600kW) and 780kW (720kW) and to introduce even larger Systems (1MW to 2.2MW) in late 2012. The foregoing net outputs are before the approximately 20kW 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 foregoing Systems will be able to be custom configured to provide substantial amounts of additional Heat Energy for heating and hot water purposes and for Co-Generation applications, thereby increasing their suitability and economic benefits.

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

Each System module was designed to be skid mounted and contain quick connect fittings making the entire System easy to handle, ship and transport. This will enable them to be placed on trailers and easily brought to where they are needed, quickly placed into service, utilized for as long as necessary (typically, until all of the wood waste is used as fuel) and then easily 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



The above graphic shows the complete AG-390 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 Fuels 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 removed from their trailers and installed and 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. They were engineered to be installed, set-up and torn-down in only 3 to 5 days (depending on crew size). **Prefabrication, modularity, ease of transport and rapid set-up and tear-down times are significant benefits of the System.**

PRODUCT BENEFITS.

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

- ✓ **ABILITY TO USE LOW COST FUEL:** The Systems will be able to 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 will enable 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 hotels, hospitals, universities and prisons) 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 and/or hot water and thereby reduce the significant amount of electricity and natural gas they purchase for these purposes.

✓ **CO-GENERATION BENEFITS:** The Heat Energy produced by the System will be 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-390 System are expected to provide a financial payback period of between 2 and 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., certain construction and demolition materials such as plywood) may be used for fuel after adding a mini-scrubber 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 expected to be less than that of a telephone's dial tone.

✓ **EASE OF TRANSPORT; REDUCED FUEL TRANSPORT COSTS; RAPID ASSEMBLY AND INSTALLATION; SMALL FOOTPRINT:** The Systems will be 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 will 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-390 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 laydown 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 operating personnel and will be able to be remotely monitored by AgriPower or the customer via telephone, satellite or the Internet.

✓ **PROVEN TECHNOLOGIES; RELIABILITY; LOW OPERATING COSTS:** The Systems will rely on proven "high temperature", "clean air" combustion and turbine 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%+).

✓ **HIGH ELECTRICAL AND HEAT OUTPUT; HIGH (60%+) 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.

✓ **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 purposes). In gasification units, turbine blades become coated with the contaminants of combustion, resulting in expensive and continuing maintenance and downtime problems. By contrast, the turbine blades in the AgriPower Systems will not come into contact with, or be damaged by, contaminants. Diesel generators require the purchase, transport and storage of highly polluting and increasingly expensive and unreliable to obtain diesel fuel oil. AgriPower's Systems can use a wide variety of readily available and inexpensive Biomass waste as fuel.

SUMMARY AND CONCLUSION.

AgriPower will soon provide a product line of Biomass and plastic fuelled, reliable, affordable, environmentally friendly and transportable mini turbine electric power and Heat Energy Systems for numerous on-grid and off-grid applications. The various sized Systems will 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 waste, that pay high costs for electricity or Heat Energy or that must purchase diesel fuel oil to use in their diesel generator sets. AgriPower's Systems should pay for themselves in 2 to 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 operation can also be arranged commencing in March, 2012.

FOR FURTHER INFORMATION, PLEASE CONTACT:

AGRIPOWER, INC.
BARRY J. BERMAN, CHIEF EXECUTIVE OFFICER
46 DEEPDALE DRIVE, GREAT NECK, NEW YORK 11021 USA
OFFICE: (516) 829-2000 • MOBILE: (516) 384-2100 • FAX: (516) 487-3163
E-MAIL: BBERMAN@AGRIPOWER.COM • WEB SITE: WWW.AGRIPOWER.COM