Q&A with Rentech CEO Hunt Ramsbottom

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by Susan Reidy

Hunt Ramsbottom is the chief executive officer, president and director of Rentech, Inc., a technology company focused on clean energy solutions. Since joining Rentech in September 2005,. Ramsbottom has leveraged his extensive business and management experience in coordinating Rentech's disparate divisions (e.g., operations, research, government affairs) to commercialize the company's patented clean-fuel technologies in order to advance both the energy security of the U.S. and the ecological stability of the planet.

During his career, Ramsbottom has acquired close to 70 small to medium companies with strong market potential – buying them at "an inflection point," growing them into larger, more profitable ventures, and strategically taking select private companies into the public realm. He came to Rentech from Circle Funding Group LLC, a middle-market buyout firm where, as principal and managing director, he spent two years acquiring a breadth of companies in the distribution and manufacturing sectors. From 1989-97, prior to seven years as CEO and chairman of the automotive repair venture M2 Automotive, he led Thompson PBE, taking the company public in 1995 and growing it into the nation's leading supplier of paints and related products for the auto-body industry. He previously served as president/CEO of Kellow Brown, a printer, packager and distributor for major computer hardware and software clients.

BFB: Tell us more about Rentech and its involvement in the biofuels industry.

RAMSBOTTOM: We acquired 100% of SilvaGas Corp. and its commercially proven biomass gasification technology, which converts a variety of biomass feedstocks (e.g., wood, agricultural residues, refuse derived fuels and energy crops) into syngas for renewable electric power or synthetic natural gas production. The biomass gasification technology can also be integrated with Rentech's technologies for the production of certified renewable synthetic jet and diesel fuel. The life-cycle carbon footprint of renewable fuels and power facilities using the Rentech-SilvaGas gasifier coupled with the Rentech Fischer-Tropsch Process for synthetic fuels will be near zero.

We announced the development of our Rialto Renewable Energy Center, which is anticipated to be the first-of-its-kind commercial facility in the country. It will convert urban green waste such as yard clippings and tree trimmings into approximately 9 million gallons of diesel fuel in California and enough renewable electricity to power about 30,000 homes.

Our planned Rialto Renewable Energy Center, which is currently in the feasibility engineering phase, will have a carbon footprint of near zero, is expected to create 250 green construction jobs and at least 55 full-time positions. The facility is expected to be operational in late 2012. Some of the diesel we produce at our Rialto Project will fuel ground service equipment at LAX, making LAX one of the greenest and cleanest airports in the country.

We made a 25% strategic investment in ClearFuels Technology Inc., a biomass gasification and project development company. ClearFuels owns a proprietary flexible biomass gasification technology platform that converts multiple rural cellulosic biomass feedstocks such as sugarcane bagasse and virgin wood waste into clean syngas suitable for integration with synthesis gas-to-liquids technologies.

BFB: What is produced at the company's demonstration unit in Colorado? How much is produced, and when did production begin?

RAMSBOTTOM: Our Product Demonstration Unit (PDU) in Colorado came on-line in August 2008. The PDU produces approximately 10 barrels a day of synthetic fuels from natural gas.

BFB: How much Jet A fuel does Rentech currently produce? Is all of it sold to the U.S. Air Force (USAF)? How is it different than other jet fuel?

RAMSBOTTOM: We can produce approximately 10 barrels a day of jet fuel. Production of a specific product and quantities depend on our needs. The USAF has purchased quantities of our certified JP-8 jet fuel (military spec). It's fully fungible with existing engines and pipelines like traditional jet fuel. Our jet fuel has lower regulated emissions, is virtually sulfur and aromatic free and can have a carbon footprint that is better than traditional jet fuel. Our jet fuel reduces aircraft particulate matter emissions by 96% in engine idle, a major source of ground level pollution. Also, the lower density of RenJet fuel could enable aircraft to have a lower take-off weight, which conserves fuel and, therefore, lowers operating costs. Alternatively, the lower density of RenJet fuel could allow aircraft to carry heavier payloads with the same volume of fuel when compared to traditional jet fuel.

BFB: Explain the process that Rentech uses to produce renewable fuel? How is this different from other fuel producers, and what are some of the benefits of this process?

RAMSBOTTOM: We will produce renewable clean fuels and power by utilizing a combination of the Rentech-SilvaGas biomass gasification process, a highly efficient gas turbine operating in combined cycle, Rentech's proprietary Fischer-Tropsch process, and UOP's product upgrading technologies.

Our process is different from other types of processes in that we use gasification coupled with Fischer Tropsch, enabling us to produce certified drop-in diesel and jet fuel regardless of feedstock. Our fuels can be used as a neat fuel or as a blend.

BFB: What types of feedstocks can Rentech use in its production process? What are some of the benefits/drawbacks to using these feedstocks?

RAMSBOTTOM: Rentech can use biomass feedstocks such as forestry waste (bark, branches, waste wood, sawdust and stumps), agricultural waste (corn stover, straw and bagasse), municipal solid waste (garbage, lawn and tree clippings, and sewage sludge), algae and energy crops. The Rentech Process can also process syngas from fossil feedstocks such as petroleum coke, lignite, coal and natural gas for the production of ultra-clean synthetic fuels and chemicals.

The advantage of using waste biomass is that we can receive tipping fees and thus have a negative feedstock cost. The advantage of using fossil feedstock is that we can do so cleanly while achieving production at large scale.

BFB: Tell us more about the Rialto project --- what is the timeframe, what will be produced, what are the feedstocks, what will be the production capacity, etc.?

RAMSBOTTOM: We just completed feasibility engineering. We expect to apply for permit applications and begin front end engineering and design early next year. We anticipate construction to begin in 2011, with the facility coming on-line in late 2012.

The facility will use woody green waste (yard clippings, tree trimmings, etc.) to produce approximately 600 daily barrels of renewable diesel and export 35 megawatts of renewable power (enough electricity for 30,000 homes).

BFB: Tell us more about the Rialto project --- what is the timeframe, what will be produced, what are the feedstocks Besides fuel, what are some of the other products that Rentech produces or hopes to produce? What markets are available for those products?

RAMSBOTTOM: We can produce renewable power which meets the Renewables Portfolio Standard (RPS). RPS is a state regulation requiring electricity providers to obtain minimum percentages of renewable power production by a certain date. Currently 24 states have an RPS mandate. We can also produce specialty waxes and chemicals.

BFB: Explain Rentech's underlying economic base. How has that helped the company during the current economic recession?

RAMSBOTTOM: Rentech is unique in that it owns a profitable nitrogen fertilizer facility located in Northern Illinois. This facility, which has been operating for over 40 years, provides nitrogen fertilizer to the US Midwest corn belt region. Our wholly-owned subsidiary has provided us with valuable cash flows that allow us to pursue development of our alternative energy business.

These cash flows have proven to be invaluable especially in the recent economic downtown, enabling us to be funded with internal cash sources. Several of our competitors who did not have cash flow went to the wayside or had to halt execution of their business plans as cash flow from the capital markets were unavailable or very expensive.

BFB: What are Rentech's long-term plans for renewable energy?

RAMSBOTTOM: We expect to continue to be leaders in the biomass-to-energy market, having an unmatched technology chain for the production of renewable drop-in fuels and renewable power. We anticipate completing the Rialto Project and announcing additional biomass to energy and repowering projects using a variety of biomass feedstocks.

BFB: What do you think are some of the challenges facing the renewable energy industry? What do you think the industry will look like five years from now?

RAMSBOTTOM: Overcoming technology and financing barriers are some of the challenges facing the renewable energy industry. Rentech is unique in that we have proven technology for the production of renewable drop-in fuels and green power that is ready for commercial deployment today. This is in fact one of the criteria for the U.S. Department of Energy loan guarantee program we are pursuing for our Rialto Project.

We are also unique in that we are a publicly traded company with access to capital and an underlying asset base (our cash flowing fertilizer production facility) that enables us to pursue the development of renewable energy projects. We also have the only operating synthetic transportation fuels facility in the U.S. and state-of-the-art laboratories at which we can not only demonstrate the technology but enhance the process as well.

We believe that renewable energy will continue to play an important role in energy production five years from now. We hope to see several renewable energy facilities producing alternative fuels, and power facilities reducing their carbon footprint by adding biomass as a feedstock or standalone biomass to power projects.