



ALTERNATIVE ENERGY — SUSTAINABLE RELATIONSHIPS

As a part of Ryan's three-pronged approach to the alternative energy market — wind, solar and biomass — the company has entered into a unique joint venture with Corval Group to pursue biomass and gasification projects. The result is Corval Ryan.

Biomass is a term covering a wide variety of organic materials from wood waste and crop residue to municipal solid waste. The most conventional process is direct incineration. Gasification is one method for

extracting energy from organic materials. The process uses high temperatures and a controlled amount of oxygen and/or steam to convert compost and other waste materials into carbon monoxide and hydrogen. The resulting mixture is called synthesis gas or syngas, which is in itself a fuel. The syngas can be utilized directly or further processed into liquid fuels.

Biomass and gasification facilities are intensely industrial, requiring expertise in mechanical and process engineering. These projects also require contractors who have big-picture approaches — companies that understand the full scope of taking an idea from research and development to full production.

Corval Ryan combines the best of the two organizations' processes and methodologies — as well as each company's individual experts in energy engineering and construction — to create biomass and gasification plants. From assisting with site acquisition, project financing and economic incentives to managing plant design and construction into full operation, the Corval Ryan team can customize solutions to meet each customer's project, technology and business needs.

Corval Ryan is currently working with Rational Energies in Minnesota; Magnolia Bioenergy on a torrefied wood-pelleting plant in Georgia, and Alliance Federated Energy on a gasification plant in Milwaukee.



Corval Ryan leadership (L to R): Jack Hunter, vice president; Bob Cutshall, president; Jim Simon, vice president; and Chris Olson, vice president.

"We've been very well received in this market," said Bob Cutshall, vice president of Corval Ryan. "People are responding to our disciplined, flexible approach and our ability to work as a trusted partner."

Ryan and the Corval Group began collaborating on alternative energy projects in 2006, and soon realized their common values, breadth of services and complementary expertise would provide customers both the strength and the flexibility necessary to deliver innovative biomass and gasification plants.

"The Corval Group brings experience in the heavy industrial market, including power, petrochemical, refining, chemical processing, manufacturing and other markets," Cutshall said. "This is a great partnership in a continually evolving market. Our two companies' combined expertise, reputation and relationships are well established."

The Corval Group — headquartered in St. Paul, Minnesota, with offices across the United States and Canada — has more than 85 years of experience in construction and fabrication across North America. Since 1921, the company has grown by adding capabilities internally, and through acquisitions such as NewMech Companies, Inc., Lawdan Industries, Verdi Construction and National Commissioning Services. All these entities were recently consolidated under The Corval Group name.

"Developing this partnership has been a great experience," said Jim Simon, vice president of Corval Ryan. "Ryan's approach to relationship-building, its knowledge of the entire real estate process, and its reputation for quality have made the company one of the country's top developers and contractors."