



▶ VIRENT RECEIVES GRANT FROM THE DOE
PAGE 2



▶ VIRENT WELCOMES NEW HIRES
PAGE 2 & 3



▶ VOTE FOR VIRENT!
PAGE 3

SUMMER | 2013



BIOFORMING
news



VIRENT IS REPLACING CRUDE OIL, CREATING FUELS AND CHEMICALS FROM NATURALLY OCCURRING, 100% RENEWABLE RESOURCES.

COMMERCIALIZATION STRATEGY UPDATE

At the end of July, Virent went through a restructuring to align company resources to fit our priorities and goals for commercialization. Today, we have a smaller company, with about 35 fewer employees. Many have contemplated if the reduction in workforce signaled concerns about our future potential and success. The decision was based on several factors which, taken together, should clearly demonstrate good business rationale to deliver long term value.

First, Shell and Virent have reached the successful completion of the technology development phase of our relationship, with future work shifting to Shell's technology center in Houston. With this change, Shell is now taking the lead to progress the integration of their biomass deconstruction efforts with Virent technology for drop-in fuels. Virent is fully supportive of Shell's efforts to continue to progress the technology. We hope this will lead to Shell investing in a commercial deployment, generating revenues in the form of royalties to Virent.

Next, the pathway to produce biobased para-xylene for Coca-Cola and other brand leaders is now ready for scale-up and is our top priority. We believe focusing on para-xylene will allow us to generate positive cash-flow in the shortest time, targeting commercial sales by 2017.

And finally, in the second quarter, we completed an FAA funded jet fuel project after shipping 100 gallons of Virent product to Wright Paterson Air Force base for

further rig and combustion testing.

We are excited and proud to have achieved these significant milestones. However, this success results in fewer R&D projects over the next 12-18 months as we evolve from an R&D concentration to a company focused on achieving commercial deployment. The reduced R&D work is the primary driver for the restructuring, and the cost savings extend our financial resources in anticipation of a challenging environment for our fundraising efforts.

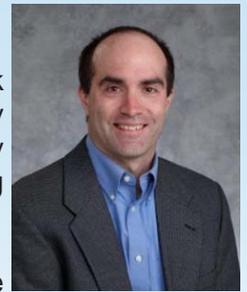


LEE EDWARDS,
CEO

I firmly believe that Virent continues to have advantaged technology with more opportunity for value than many of our competitive peer group. We have a world class organization and facility. We have an exciting portfolio of R&D projects over the next two years, focused on biobased para-xylene and converting biomass into drop-in products under our DOE grants. Our joint development program with Coca-Cola continues into 2014 in support of long term competitive advantage from the growing demand for bio-based para-xylene, and we are actively seeking new chemicals and fuels partnerships with international reach.

MEET EMPLOYEE ANDREW HELD

Since Andrew began his career with Virent in 2007, he has been primarily focused on feedstock development, which is a combination of commercial and technical work for developing technology and supply chain concepts to feed Virent's BioForming process. Today this work is substantially funded by the DOE, and Andrew finds the progress on teamwork and skills for developing proposals and delivering these projects "extremely rewarding."



Andrew's success in previous positions has given executive leadership confidence that he can take on new and key roles as the company moves forward. Very recently, Andrew's role changed from Senior Director of Feedstock Development to Senior Director of Deployment and Engineering. In his new position, he will be responsible for early deployment and engineering needed to achieve commercialization of ethanol to para-xylene. Prior to working at Virent, Andrew worked at Cargill for 10 years in a combination of operating plants, new start-ups, and a technology group at R&D headquarters. However, the "great prospects, location, and opportunity to do something more entrepreneurial" ultimately led Andrew to accept a position with Virent.

Andrew received his B.S. in Chemical Engineering from the University of Minnesota – Twin Cities and an M.S. in Chemical Engineering from the University of Wisconsin – Madison where he worked with Doug Cameron, an expert in biochemical engineering who has spearheaded many technical projects in the cleantech industry. Andrew is married with five children including a sophomore in high school, three in elementary and a three year old. He enjoys outdoor activities with the family such as bike riding, cross country skiing, ice skating, and gardening.

VIRENT RECEIVES DOE GRANT

Virent announced exciting news in early July. We were selected to receive a federal award of up to \$4M, subject to final contract negotiations with the US Department of Energy, to develop carbon conversion efficiency of biomass to distillate products ideal for blending into existing diesel and jet fuel infrastructures. The award is part of a \$13M program that the U.S Department of Energy (DOE) is using to fund projects aimed at developing upgraded processes to increase biofuel yields from non-food lignocellulosic feedstocks.

During the three year project, Virent will apply a novel fractionation and separation process coupled with its patented catalytic BioForming® technology platform to optimize conversion of carbon from lignocellulosic biomass to hydrocarbon fuels. Virent will investigate both debarked loblolly pine and corn stover as feedstocks, in collaboration with Idaho National Laboratory's state-of-the-art technologies and expertise for the pretreatment of the biomass.

"We are very excited to receive this award," explains Dr. Randy Cortright, co-founder and chief technology officer at Virent. "Increasing carbon conversion efficiencies will ultimately reduce the cost of converting biomass to hydrocarbon transportation fuels and accelerate technical advancements to meet the needs of the Renewable Fuels Standard established by the EPA."



WELCOME TOBIN JOHNSON!

Just last week, Tobin Johnson joined the Virent team as Senior Director of Operations. Tobin brings to Virent over 30 years of experience in Operations, with his most recent roles including COO at Utica Energy and Ethanol Plant Manager at Renew Energy. In addition to managing plants, he held positions managing EHS initiatives for the Dow Chemical Company.

At Virent, Tobin will manage Pilot Plant Operations, Operations Engineering and Facilities. Tobin received a B.S. in Chemistry from the University of Minnesota Duluth and an M.S. in Chemistry from Illinois State University.



VIRENT LAUNCHES TWITTER ACCOUNT



Virent is happy to announce the launch of our official Twitter account. Using Twitter we will provide up to the minute news, links to articles that showcase Virent's achievements and any other interesting or educational reads related to biofuels and biochemicals. Follow us at @Virent_Inc. Don't have a Twitter account? Connect with us on LinkedIn by clicking [here](#).

VOTE FOR VIRENT!

It's that time of year again; the Biofuels Digest's Top 50 Companies in Bioenergy and Top 30 Companies in Biobased Chemicals and Materials competition. Give us some love and vote for us! It's as easy as clicking [here](#). You can also vote via Twitter and Facebook by clicking [here](#). Last year Virent ranked 16th, help us move up this year! Final rankings will be announced October 16th at the Advanced Biofuels Leadership Conference.



LEADERSHIP CHANGES UNDERWAY

As you read on the cover page, Virent is sharpening its focus on chemicals to achieve commercial deployment at an earlier date. We may have gone through a restructuring, but we are just as strong as ever, and we are confident that we have the right people with the expertise needed to succeed. In support of shifting priorities, a few employees have taken on new roles at Virent.

Bob Rozmiarek, our former Business Analysis Manager has taken on the position of Director of Program Management and Business Analysis. He will be responsible for managing priorities across government programs, creating a framework for managing value and priorities across all projects as well as his current business analysis and TEA responsibilities. **Andrew Held**, former Senior Director of Feedstocks has taken on the role of Senior Director of Deployment and Engineering, and he will be responsible for early deployment and engineering needed to achieve commercialization. **David Hitchcock**, former VP of Government Affairs, has taken on the role of VP of Corporate Affairs. In addition to his government affairs responsibilities, he will be taking an active role in fuels and chemicals business development activities. We have also hired a Director of Operations, **Tobin Johnson**, to lead our Pilot Plant Operations, Engineering Operations and Facilities teams.

Virent has also formed an Employee Development Task Force led by Jennifer Phillips, HR Manager, David Hitchcock, VP, Corporate Affairs, and Lisa Kamke, Manager of Project of Data Management. This team has been tasked with leveraging internal resources to design programs to enhance our ongoing employee development efforts. The team will promote more productive interpersonal interactions within Virent, while supporting individual professional and personal growth.



WELCOME TOLGA GULMEN!

Virent continues to find success in developing a patent portfolio that encompasses the many ways in which the BioForming® technology can provide products to the commercial market. To that end, Virent has found the need to expand its team by hiring Tolga Gulmen to support our patenting efforts. Tolga is a patent attorney with a Ph.D. in Chemistry from the University of Wisconsin – Madison, and a J.D. from the University of California, Berkley School of Law.

Prior to working at Virent, Tolga worked as an Invention Manager for Northwestern University's Innovation and New Ventures Office where he managed a portfolio of over 300 inventions and 1000 applications in areas of chemistry, nanotechnology, therapeutics, medical device and semi-conductors. In addition to Tolga's patent expertise, he will be very valuable in other areas of Legal including the review and drafting of agreements and the overall management of Virent's intellectual property portfolio.



VIRENT ON THE ROAD

Virent presents around the world at a wide variety of events, and our annual calendar is kept up-to-date on the [events area of our website](#).

| | | |
|-----------------------|--|-------------------|
| September 10, 2013 | RETECH Biofuels Panel | Washington, DC |
| September 16-17, 2013 | GTC's 4th Biobased Chemicals: Commercialization & Partnering Meeting | San Francisco, CA |
| September 17-18, 2013 | 3rd World Bio Markets Brazil | Sao Paulo, Brazil |
| September 18-20, 2013 | 2013 International Bioenergy and Bioproducts Conference | Green Bay, WI |
| November 2-3, 2013 | Advanced Biofuels Leadership Conference NEXT | San Francisco, CA |
| November 21-23, 2013 | Defining the Future | Munich, Germany |