

**Legal Name**

Virent, Incorporated

CEO Lee Edwards

Co-Founder & CTO

Dr. Randy Cortright

Headquarters

Madison, Wisconsin

Founded 2002

Employees 120

Key Partners

Cargill, Coca-Cola, Honda and Shell

Facility

65,000 sq. ft. of research and development, analytical, pilot plant, and office space

Professional Service Firms

Foley & Lardner - General
Quarles & Brady - IP Law
Grant Thornton – Audit
JPMorgan Chase - Banking

Financing History

\$77M+ in private investments
\$75M+ in industrial partnerships and government support

Learn More

www.Virent.com

Virent is replacing crude oil by creating the chemicals and fuels the world demands using a wide range of naturally-occurring, renewable resources. Its patented technology features catalytic chemistry that converts plant-based sugars into a full range of products identical to those made from petroleum, including gasoline, diesel, jet fuel, and chemicals for plastics and fibers; Virent's technology can replace over 90% of a barrel of crude oil. The development of Virent's BioForming® technology platform is supported through strategic investors, including Cargill, Coca-Cola, Honda and Shell.

Virent's BioForming Technology Produces Both Chemicals and Fuels

Virent's patented BioForming technology leverages catalytic chemistry to convert renewable plant-based sugars into a full range of bioproducts identical to those made from petroleum including fuels and chemicals for plastics and fibers.

- Virent's BioFormPX™ (Paraxylene) enables production of 100% renewable PET (plastic) packaging derived from sustainable plant sugars.
- Virent's plant-based gasoline and diesel fuels can compete today with petroleum priced above \$80/barrel.

Ready-to-Use Direct Drop-In Replacement Products

Virent's fuels and chemicals have the same molecular composition and performance as their petroleum-derived counterparts. For this reason, Virent's products are direct drop-in replacements that enable full utilization of existing logistics infrastructure without blending limitations.

- Virent's products are fully compatible with the existing petroleum refining infrastructure, such as pipelines, tanks, pumps and engines of all kinds, offering renewable, sustainable plant-based alternatives without additional manufacturing investment.
 - Virent's reliable catalytic process allows continuous fuel and chemical production. Required volumes of fuel or chemicals can be created non-stop, which means improved efficiency and a shorter time-to-market.
 - Gasoline made via the BioForming process is high octane and features a 20% - 30% BTU/gallon advantage over ethanol with no blend wall limitations.

Feedstock Flexibility

Virent's BioForming process is able to use a wide variety of feedstocks, including cellulosic feedstocks like bagasse, corn stover, grasses, sorghum and wood as well as conventional feedstocks like beet sugar, sugar cane and corn starch. Virent's feedstock flexibility enables the use of the lowest cost domestic biomass sources available in any location.

Virent's BioForming Technology is Endorsed by Leaders in Industry & Government

Virent has an excellent track record of attracting and maintaining mutually-beneficial partnerships with world-class companies and government agencies.

- Our corporate investors and partners represent leading companies across the beverage, energy, automotive and agricultural industries – Cargill, Coca-Cola, Honda and Shell.
- Virent's renewable gasoline is blended by Shell into the fuel used in competition by Scuderia Ferrari Formula 1 team.
- Virent has raised over \$77 million in three rounds of venture and private funding.
- Virent has attracted over \$75 million in federal funds and competitive grants from numerous U.S. government agencies: Department of Energy, Department of Agriculture, National Institute of Standards and Technology, National Science Foundation, Federal Aviation Administration and the U.S. Navy.
- Virent's patented BioForming technology is the recipient of numerous awards: The World Economic Forum's "Technology Pioneer" Award, the EPA's "Presidential Green Chemistry Challenge Award", an ICIS Innovation Award and others.

Virent's BioForming Technology has Enormous Potential to Transform a Crude Oil-Based Economy

Together with its partners, Virent is leading the creation of a sustainable and affordable bio-based economy. Through the development of drop-in petroleum replacements, Virent's technology has the potential to spur economic growth, benefit the environment and improve energy security – all while replacing crude oil with renewable, domestically-produced feedstocks.

Growing Industries & Driving Economic Development

- Virent's game-changing technology taps into enormous market potential in the biofuels industry – \$40-60 billion in the U.S. and nearly \$250 billion globally by 2022. (Source: Deutsche Bank Global Markets Research – Clean Technology: September 15, 2011)
- Virent's robust commercialization plan will enable large scale deployments – first commercial scale plant to be built in 2015
- Virent's technology has the potential to grow the bioproducts industry which already accounts for 40,000 jobs created or saved, and its expansion presents an opportunity to revitalize the U.S. chemicals and plastics industry
- Domestic feedstock production and processing will create jobs and energy to revitalize and develop rural communities across the United States.

Reducing Environmental Impact & Improving Energy Security

- By replacing crude oil with plant-based fuels and chemicals, Virent's technology helps reduce U.S. dependence on oil and imports from politically unstable regions.
- Virent's process increases fuel supply stability and decreases cost through domestic production and renewable feedstocks.

Learn more at www.Virent.com