

Biobased Products and Transportation Fact Sheet

Biobased products are commercial or industrial products that are composed completely or mostly of biological products or renewable agricultural materials. The development of new technologies to produce biobased products will aid in achieving energy independence and diversify agriculture in the region while promoting rural and sustainable development.

Measurable Goals

- **By 2012:** Advanced cellulosic and other low-carbon transportation fuels should be commercially produced in the region.
- **By 2015:** E85 will be offered at 15 percent of gas stations compared to the current level of 3 percent.
- **By 2020:** E85 will be offered at 20 percent of gas stations.
- **By 2025:** E85 will be offered at 33 percent of gas stations.
- **By 2025:** Average fossil fuel inputs in the production of conventional biofuels in the region will be reduced by at least 50 percent.
- **By 2025:** At least 50 percent of all transportation energy consumed in the region will be from regionally produced biofuels and other low-carbon advanced transportation fuels.

Objectives

- Develop the Midwest's capacity for production of biofuels and other low-carbon advanced transportation fuels to advance U.S. energy independence, add value for consumers, revitalize rural economies and the region's manufacturing base, and decrease greenhouse gas emissions.
- Develop and commercialize a variety of biomass-utilizing technologies and other low-carbon advanced transportation fuels covering an array of energy products and biobased products.
- Pursue innovative opportunities to increase the biofuels supply while improving water quality, soil quality and wildlife habitat.

Policy Options

- Advance conversion technology commercialization.
- Broaden existing bioenergy incentives and create new incentives that promote many uses of biomass, including not only a range of different liquid fuels, but also natural gas, heat and electricity.
- Provide market pull and the distribution infrastructure for biofuels and advanced transportation fuels by promoting renewable fuel standards, creating incentives for increased public demand for fuel-efficient vehicles, developing quality standards for biodiesel and other fuels, and adopting retail tax incentives that encourage retailers to sell biofuels and other advanced transportation fuels.
- Overcome the difficulty of biomass feedstock logistics by employing assistance and incentives to projects that are seeking to develop a supply of cellulosic biomass for bioenergy projects.
- Create a uniform, regional low-carbon fuels policy – implemented at the state level as a standard, objective or incentive – and report annually on progress.
- Develop incentives for increasing vehicle fuel efficiency and reducing greenhouse gas emissions.

Current Initiatives

- Virent Energy Systems is a Wisconsin-based energy company commercializing the BioForming® process, a novel chemical pathway that converts plant sugars, including from cellulosic biomass, into the same range of hydrocarbon molecules now refined from petroleum to make fuels and chemicals. Virent's gasoline, diesel, and jet fuel have the same composition, performance, and functionality as petroleum fuels and are compatible with today's engines and pipelines with no new infrastructure investment. Virent's fuels can be stand-alone products, used at high blends with petroleum fuels, or blended with ethanol. The BioForming technology is based on the Aqueous Phase Reforming process invented at the University of Wisconsin – Madison.
- As part of the Governors' Energy Platform, and with the cooperation of the U.S. Department of Agriculture, the Midwestern Governors Association has established a regional bioproduct procurement system. The system creates common definitions and standards for bio-based products and sets out methods for the procurement of those products by the states. The system's lists of products makes it easier for state procurement officials to choose bioproducts from throughout the 12-state MGA region.