

SUSTAINABLE BIOFUELS



www.homegrownprosperity.org

SUMMER 2008

WORC supports sustainably produced biomass as a clean, renewable source of liquid fuels and thermal generation.

- The full life-cycle carbon footprint of biodiesel is 78% lower than conventional diesel. Most users of biodiesel will blend it with regular diesel, but even at a 20% blend of biodiesel to regular diesel, the reductions in CO₂ is significant. Other harmful air pollutants like sulfur dioxide and hydrocarbons are significantly reduced with biodiesel use.
- Farm scale and small community scale produced biodiesel provides a symbiotic link between the region's grain producers who can readily adapt to growing oilseeds and range cattle producers who can readily utilize the highly nutritious feed-meals produced as a byproduct of the fuel. Farmers can grow the seed, ranchers can feed the byproduct; both can utilize the clean, renewable fuel in production agriculture, and they can collaboratively finance and produce it. (See WORC's white paper "Biodiesel Benefits for Cattle Producers" at www.worc.org)
- Biodiesel produced from oilseeds grown in resource conserving rotations with small grains promotes conservation of fertilizer, herbicides and pesticides.

Energy Security and Independence Act 2007 Renewable Fuel Standard (RFS)

Congress placed a precedent-setting Low Carbon Fuel Standard on all new biofuels in order to qualify for the federal RFS. This tough standard is unprecedented in federal law, as well as surpassing those of the European Union's, which is currently considering revisions to strengthen the sustainability guidelines for its biofuels goals. The new law sets the following conditions to ensure that biofuels will be produced sustainably.

- Corn based ethanol was capped at 15 billion gallons, double the current production capacity, the life cycle greenhouse gas emissions for conventional ethanol must be 20% lower than conventional fuel.
- Biodiesel must reduce lifecycle greenhouse gas emissions above 50% to qualify for inclusion in the Renewable Fuel Standard.
- Advanced biofuels, such as ethanol made from waste products or perennial prairie grasses, must reduce the lifecycle greenhouse gas emissions by 60%.
- In addition, land use conversions are strictly limited under the new law, and national forests are protected. A major concern, secondary land use impacts must be included calculating the life cycle greenhouse gas emissions.

What about the net energy of ethanol?

- This issue has been visited and re-visited in numerous scientific surveys. The majority verify that, using current technology, corn based ethanol delivers a net gain. For one unit of liquid energy it takes .74 units of fossil energy inputs (life-cycle). By contrast, one unit of refined gasoline requires 1.23 units of fossil energy over its lifecycle. (Gasoline from Canadian tar sands or Colorado oil shale would be significantly more energy intensive.)
- Advanced ethanol produced from feedstocks such as perennial prairie grasses presents the greatest potential for energy gains. For example, switchgrass yields more than five times the energy used to grow it and convert it, according to a 2008 study published by the National Academy of Sciences, using data collected in 10 farming states, including North and South Dakota over a five-year period.
- Both the Union of Concerned Scientists and the Natural Resources Defense Council support the limited use of corn based ethanol as a strategic bridge to rapidly transition to a low carbon future.

The High Cost of Food

The cost of basic food is going up rapidly and many are concerned that growing food crops for fuel is a major contributor to this inflationary pressure. Moreover, the world's most vulnerable populations bear the brunt of higher basic food costs.

WORC advocates for a strategic reserve of any commodities used to produce biofuels, as an essential mechanism to protect against speculative run-ups in global commodities markets.

- Biofuels play a very minor role in the global food price, consuming only 4% of world grain. Most of the commodities, like rice, that are experiencing the greatest increases are not even biofuels feedstocks.
- Food sovereignty for nations and regions, and forced globalization policies imposed on developing third world economies by the World Bank, the International Monetary Fund, and trade agreements like the North American Free Trade Agreement (NAFTA) play the greatest role in undermining food security in the world's poorest regions and laid the groundwork for the current crisis.
- Beginning with the energy markets in the 1980's, regulators made a series of far-reaching decisions that gradually loosened oversight of complex commodity derivatives and created loopholes for large speculators, allowing them to trade virtually unlimited amounts of corn, wheat and other food futures in which the current prices in food have run amok.
- For every dollar consumers spend on food, only 20% is attributable to the actual costs of the food itself. The remaining 80% is tied to increases in labor, energy, transportation, advertising, packaging, and other costs. The greatest inflationary engine in our current grocery bills is \$100+ cost per barrel of oil.

Local Ownership and Food Security Priority Goals of Sustainable Biofuels Production

WORC advocates for public policies that will allow a level playing field for smaller, locally owned biofuels production. For example, small farmer-rancher partnerships or cooperatives can add value to the large range cattle industry of the region, while providing clean, renewable biodiesel to operate agriculture and school buses across the rural Western states.



WORC is a regional network of seven grassroots community organizations, which includes 10,000 members and 44 local chapters. WORC helps its member groups succeed by providing trainings and coordinating regional issue campaigns.

Billings Office

220 S. 27th Street, Suite B
Billings, MT 59101
billings@worc.org
www.worc.org
(406)252-9672

Lemmon, SD Office

2307 5th Ave NE
Lemmon, SD 57638
jerilynn@worc.org
(701) 376-7077

Washington, D.C. Office

110 Maryland Ave., NE, #306
Washington, DC 20002
dc@worc.org
(202)547-7040

Montrose, CO Office

60584 Horizon Drive
Montrose, CO 81401
montrose@worc.org
(970)323-6849

WORC Member Groups

Dakota Resource Council

PO Box 1095
Dickinson, ND 58601
drc@drcinfo.com
www.drcinfo.com
(701)483-2851

Northern Plains Resource Council

220 S. 27th St., Suite A
Billings, MT 59101
info@northernplains.org
www.northernplains.org
(406)248-1154

Dakota Rural Action

PO Box 549
Brookings, SD 57006
action@dakotarural.org
www.draction.org
(605)697-5204

Oregon Rural Action

PO Box 1231
La Grande, OR 97850
info@oregonrural.org
www.oregonrural.org

Idaho Rural Council

PO Box 118
Bliss, ID 83314
irc@idahoruralcouncil.org
www.idahoruralcouncil.org
(208)352-4477

Powder River Basin Resource Council

934 N. Main St.
Sheridan, WY 82801
resources@powderriverbasin.org
www.powderriverbasin.org
(307)672-5809

Western Colorado Congress

P.O. Box 1931
Grand Junction, CO 81501
info@wccongress.org
www.wccongress.org
(970)256-7650