



Illinois River Energy

Plant Basics:

- Modern state-of-the-art dry grind corn ethanol refinery.
- 81 acre site in Rochelle, Illinois annexed into the Lee County Enterprise Zone.
- 65 employees, largely from Rochelle, Rockford, DeKalb, & western suburbs of Chicago.
- Plant constructed using union labor.
- Initial start-up in December, 2006. Expansion start-up in November, 2008.
- Consumes about 40 million bushels of corn and 3.1 million MMBtu of natural gas per year.
- Produces about 112 million gallons of fuel ethanol and 320 thousand tons of dried distillers grains per year.
- Majority-owned by GTL Resources PLC with individual (mostly Illinois) minority investors.

Energy Efficiency:

- An efficient modern design – IRE’s energy efficiency far surpasses the efficiency typical of earlier designs in the industry (that are often cited to discredit corn ethanol).
- IRE’s fossil energy ratio is significantly favorable – it takes only 0.54 Btu of fossil energy to produce 1.00 Btu of ethanol, compared to 1.23 Btu/Btu for average gasoline.
- Corn ethanol production technology is still evolving rapidly – there are many opportunities for further significant improvements in energy efficiency.

Global Warming Impact (GWI):

- IRE is the first ethanol plant that has had its lifecycle carbon footprint and local indirect land use impacts rigorously determined (by the Energy Resources Center, University of Illinois at Chicago).
- Today, direct emissions from plant operations, the production of IRE’s corn, and inbound/outbound logistics are about 54 g/MJ (grams of CO₂ equivalent per MJ of energy released) versus about 92 g/MJ for 2005 average gasoline – a 41% reduction.
- Less than 1,000 acres have been converted from non-farm into farm use in IRE’s corn draw area since IRE has been in operation – there is no local indirect land use impact for IRE.
- However, the most recent international land use impact studies show that on average Midwest produced corn ethanol has an indirect land use impact of only 14 g/MJ, yet the USEPA and California ARB are resistant to adopting this best available science in their regulatory interpretation of statutes.
- If you consider this average Midwest plant indirect land use impact factor, IRE ethanol has a lifecycle GWI of 68 g/MJ – a 26% reduction!