Net Energy Balance of Ethanol Studies
Corn Production Inputs Per Acre
Comparison Chart

	USDA Study 2002 (3 year weighted average of 9 highest corn-producing-states)		**Pimentel and Patzek 2005 (Mean for all land growing corn in all 50 states)**		
input	Quantity	Energy *Btu per bushel*	Quantity	Energy *Btu per bushel*	*differences*
Yield: *bushels/acre*	125		138.5		Pimentel (P) assumed 13.5 higher
Seeds: *kernels/acre*	25,495	242	24,460	6,007	P uses 5,765 btu MORE energy for seeds
Labor: (Cust-om Work) *dollars/acre*	15.07	3,366	366.05	5,337	P uses 350.98 MORE dollars per acre in labor
Machinery: *pounds/acre*	N/A		49.06	11,760	P accounts for production of machinery
Diesel: *gallons/acre*	8.6	11,175	9.68	11,587	P uses a small amount MORE
Gasoline: *gallons/acre*	3.09	3,859	4.4	4,678	P uses a small amount MORE
LPG: *gallons/acre*	6.36	5,200	N/A		P does not account for LPG
Electricity: *kWh/acre*	77.13	5,665	32.6	392	P uses 44.53 LESS kWh/acre
Natural Gas: *Cubic ft./acre*	200	1,768	N/A		P does not account for natural gas
Nitrogen: *pounds/acre*	129.38	19,082	136.48	28,280	P uses 7.1 MORE lbs/acre

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input	Quantity	Energy *Btu per bushel*	Quantity	Energy *Btu per bushel*	*differences*
Phosph(ate/orus): *pounds/acre*	48.16	789	57.98	3,119	P uses 9.82 MORE pounds and 2,330 MORE btu
Potassium: *pounds/acre*	59.25	1,776	68.68	2,899	P uses 9.43 MORE pounds and 1,123 MORE btu per bushel
Lime: *pounds/acre*	15.35	90	999.04	3,639	P uses 983.69 MORE lbs/acre
Irrigation: *inches/acre*	N/A		1.29	3,697	P accounts for irrigation
Chemicals: dollars/acre	26	3,797	444	10,397	P spends $418 more on chemicals
Transport: *pounds/acre*	input hauling	663	181.97	1,952	P uses 1,289 MORE btu for transport
Totals:		57,476		93,747	P uses 36,271 more BTU/bushel