

**Local Economic Impact Analysis  
Jasper Clean Energy Center Project  
July 22, 2011**

Twisted Oaks Corporation, along with its development team, plans to convert Jasper Municipal Electric Utilities' existing 14.5 MW coal generating station into a 75 MW renewable energy generating center – the Jasper Clean Energy Center (JCEC). The existing coal boiler will be converted to combust agricultural sourced renewable biomass fuels. The project will include the development of a regional supply of energy crops.

This report was prepared by Bingham Economic Development Advisors, LLC to assist the City of Jasper in evaluating the proposed development and the direct economic impact of the proposed JCEC project on the local community. The study focuses solely on the direct jobs and investment associated with the project and the indirect construction, agricultural and trucking jobs that can easily be attributed to the project. No “multipliers” were used to calculate additional induced impacts of the project, therefore, the estimates provided of the project benefits to the community should be considered conservative.

The project will also generate new revenues for the city's water, natural gas, electric and wastewater utilities. It is beyond the scope of this study to determine the benefit realized from the increased utilization of these utilities to the existing ratepayers.

Bingham Economic Development Advisors, LLC (Bingham Economic) is a wholly-owned subsidiary of Bingham McHale law firm and based in Indianapolis, Indiana. Bingham Economic is a specialized economic development firm with over 30 years of experience serving corporate and community clients throughout the United States.

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**Project Assumptions**

This study uses a number of underlying assumptions. These assumptions are based on information provided by the developer and are summarized in the table below.

Start of Operations	Late 2013
Construction Period	18 – 24 months
Construction Jobs	75
New Annual Construction Payroll (construction period only)*	\$2,719,800
Direct new full-time Jobs	30 (20 new plus 10 saved)
New Direct Annual Payroll**	\$1,108,110
Assessed Value of Existing Real Property at Project Site	\$3,000,000
Capital Investment in Real Property Improvements	\$7,000,000
Capital Investment in New Personal Property	\$90,000,000
Indirect Agricultural Jobs	30
Indirect Trucking Jobs	10
New Indirect Annual Payroll***	\$1,100,090
<p>* County average annual salary for construction workers is \$36,264  **County average annual salary for manufacturing workers is \$36,937  *** County average annual salary for agricultural workers is \$21,691. County average annual salary for transportation workers is \$44,936</p>	

**Property Tax Assumptions**

This study assumes that the existing real property at the project site will be assessed at \$3 million. An additional \$7 million in real property improvements will be added to the site and \$90 million in new improvements and equipment will be classified as personal property tax. For property tax estimations, it was assumed that all of the equipment is depreciated under Tax Pool #2 and the local property tax rate was held constant at its current rate of 2.2113 per \$100 of assessed value. The study estimates property tax revenues assuming that no property tax abatement is provided by the community. Property tax abatements or negotiated Payments in Lieu of Property Taxes (PILOT) may reduce the projected property tax revenues.

### **Lease and Royalty Payment Assumptions**

Annual lease payments of \$425,000 begin at the start of construction and then increase, adjusting for inflation, by two percent each year beginning in 2014. This study assumes an annual royalty payment of \$112,000 beginning in 2015 increasing by two percent each year thereafter.

### **Natural Gas Pipeline Fee Assumptions**

The Project will require a new high pressure natural gas pipeline that may result in additional revenues or cost savings for the Gas Department. These additional revenues or cost savings are not included in this study.

### **Fire Protection Contributions Assumptions**

The JCEC project as a taxpayer in Jasper will be entitled to the same level of fire protection services as other industrial customers. The JCEC has agreed to make annual contributions to the Jasper Volunteer Fire Department. The contribution in the first year will be \$50,000, then \$25,000 per year thereafter increasing by two percent each year.

### **Terminal Value of the Project**

At the end of the lease, the city will receive title to facility. The value of the fully-operational closed-loop biomass fueled generating station is assumed to be \$10 million at the end of the twenty year lease.

### Projected Benefits to the Local Community

The benefits of the proposed Jasper Clean Energy Center project are summarized in the table below. For purposes of this report, benefits to the community are defined as increases in revenue to the city and county directly attributable to the JCEC project. Increased revenues include lease and other related payments from the developer, real and personal property tax revenue and county income taxes.

Total benefits to the community in the form of additional direct city and county revenues are estimated to be \$42.77 million from the start of the project through the end of the 20-year lease. The present value of the benefits using a five percent discount rate is \$20.22 million. An annual breakdown of the local benefits is included in Attachment A.

	Pre - Construction Period	Construction Period (2 years)	Total 20-Year Lease Period	Total
Option Agreement Payments	\$300,000			\$300,000
Lease Payments		\$850,500	\$10,743,568	\$11,602,068
Royalty Payments			\$2,771,305	\$2,771,305
Donations to Fire Department		\$50,000	\$607,434	\$657,434
Real Property Tax			\$3,980,340	\$3,980,340
Personal Property Tax			\$12,936,104	\$12,936,104
County Income Tax		\$81,594	\$441,620	\$523,214
Estimated Terminal Value of Project				\$10,000,000
<b>Total Direct Project Benefits</b>	<b>\$300,000</b>	<b>\$990,094</b>	<b>\$31,480,372</b>	<b>\$42,770,466</b>
<b>Present Value of Project Benefits (5%)</b>				<b>\$20,220,219</b>

Attachment A

**Projected Local Government Revenue**

**Jasper Renewable Energy Center**

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Lease Option Agreement Payment	\$ 120,000	\$ 180,000												
Lease Payment			\$ 425,000	\$ 433,500	\$ 442,170	\$ 451,013	\$ 460,034	\$ 469,234	\$ 478,619	\$ 488,191	\$ 497,955	\$ 507,914	\$ 518,073	\$ 528,434
Annual Royalty Payment				\$ 50,000	\$ 112,000	\$ 114,240	\$ 116,525	\$ 118,855	\$ 121,232	\$ 123,657	\$ 126,130	\$ 128,653	\$ 131,226	\$ 133,850
Donation to Volunteer Fire Dept.				\$ 50,000	\$ 25,000	\$ 25,500	\$ 26,010	\$ 26,530	\$ 27,061	\$ 27,602	\$ 28,154	\$ 28,717	\$ 29,291	\$ 29,877
Real Property Tax					\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017
Personal Property Tax					\$ 796,068	\$ 1,114,495	\$ 835,871	\$ 636,854	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051
County Option Income Tax			\$ 40,797	\$ 40,797	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081
Estimated Terminal Value of Project														
<b>Total Revenue</b>	<b>\$ 120,000</b>	<b>\$ 180,000</b>	<b>\$ 465,797</b>	<b>\$ 574,297</b>	<b>\$ 1,596,336</b>	<b>\$ 1,926,346</b>	<b>\$ 1,659,537</b>	<b>\$ 1,472,572</b>	<b>\$ 1,445,061</b>	<b>\$ 1,457,599</b>	<b>\$1,470,388</b>	<b>\$1,483,433</b>	<b>\$1,496,739</b>	<b>\$1,510,311</b>

Present Value @ 5%: \$20,220,219.25

Attachment A (continued)

**Projected Local Government Revenue  
Jasper Renewable Energy Center**

	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>Total</u>
Lease Option Agreement Payment												\$ 300,000
Lease Payment	\$ 539,003	\$ 549,783	\$ 560,778	\$ 571,994	\$ 583,434	\$ 595,103	\$ 607,005	\$ 619,145	\$ 631,528	\$ 644,158		\$11,602,068
Annual Royalty Payment	\$ 136,527	\$ 139,258	\$ 142,043	\$ 144,884	\$ 147,782	\$ 150,737	\$ 153,752	\$ 156,827	\$ 159,964	\$ 163,163		\$ 2,771,305
Donation to Volunteer Fire Dept.	\$ 30,475	\$ 31,084	\$ 31,706	\$ 32,340	\$ 32,987	\$ 33,647	\$ 34,320	\$ 35,006	\$ 35,706	\$ 36,420		\$ 657,434
Real Property Tax	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017	\$ 199,017		\$ 3,980,340
Personal Property Tax	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051	\$ 597,051		\$12,936,104
County Option Income Tax	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081	\$ 22,081		\$ 523,214
Estimated Terminal Value of Project											\$10,000,000	\$10,000,000
<b>Total Revenue</b>	<b>\$1,524,154</b>	<b>\$1,538,274</b>	<b>\$1,552,677</b>	<b>\$1,567,367</b>	<b>\$1,582,352</b>	<b>\$1,597,636</b>	<b>\$1,613,225</b>	<b>\$1,629,127</b>	<b>\$1,645,346</b>	<b>\$1,661,890</b>	<b>\$10,000,000</b>	<b>\$42,770,466</b>

Present Value @ 5%: \$20,220,219.25