



California Agricultural Biofuel Forum  
September 22, 2011

# The Facility



# Uni-systems do Brazil, Ltda



Brazil offices



Miami offices

# Uni-systems Steam Boilers and Co-gen Plants



# Uni-systems Sugar cane juice extraction plants



# Uni-systems Turbines, turbo generator sets



# Uni-systems Distilleries



# Fagen, Inc.



## WELCOME

Fagen, Inc. was founded on the principle of making our clients successful. From local, agricultural grain roots initiatives to construction management for Fortune 500 companies, we offer a broad range of skills and services necessary to be your single-source contractor.

Our goal is to work with you as a partner, to introduce you to the variety of services Fagen, Inc. provides, and then to guide you down the road to success. We will be there to make sure your project crosses the finish line on time, within budget, and with the highest craftsmanship possible.

Welcome to Fagen, Inc.



Ron Fagen  
President & CEO



## CORPORATE OFFICE

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## CONSTRUCTION SERVICES

Civil	Insulation
Structural	Rigging
Mechanical	Millwright
Electrical	Equipment Setting
Instrumentation	

*"We chose Ron Fagen and Fagen, Inc. because of their history and reputation of integrity within the ethanol industry. Fagen delivered a plant that has surpassed all of our expectations and guarantees for quality workmanship, efficiency, and performance."*

—Valer Wendland,  
President/CEO,  
Golden Grain Energy

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## Statement of Qualifications

### BIDDING INTEREST

Fagen, Inc. is interested in bidding the following type of work:

Mechanical	Insulation
Electrical	Rigging
Civil	Millwright
Instrumentation	Equipment Setting

### LICENSING

Fagen, Inc. is currently licensed/certified in the states listed below. Other states can be quickly added as needed. We are willing, ready and able to work anywhere in the Continental United States & Canada.

Alabama	Indiana	Nebraska	South Carolina
Alaska	Iowa	Nevada	South Dakota
Arizona	Kansas	New Hampshire	Tennessee
Arkansas	Kentucky	New Jersey	Texas
California	Louisiana	New Mexico	Utah
Colorado	Maine	New York	Vermont
Connecticut	Maryland	North Carolina	Virginia
Delaware	Massachusetts	North Dakota	Washington
Florida	Michigan	Ohio	West Virginia
Georgia	Minnesota	Oklahoma	Wisconsin
Hawaii	Mississippi	Oregon	Wyoming
Idaho	Missouri	Pennsylvania	Ontario, Canada
Illinois	Montana	Rhode Island	Saskatchewan, Canada

### NON-UNION CONTRACTOR

Employees in Construction	800+
Employees in Corporate & Branch Offices	130-200
Totals	1000+

### ESTIMATING & SCHEDULING TOOLS

Timberline Estimating, Primavera, Suretrack, Expedition, Procore

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# Fagen, Inc.



## Company Profile

### ◆ FAGEN IS THE LARGEST, MOST RESPECTED GREEN ENERGY DESIGN-BUILDER IN THE U.S.

*"The Fagen, Inc. team is good to their word and their word is their bond. They have exceeded expectations for meeting our needs in building a high quality facility, which gives us maximum performance and efficiency."*

—Raymond E. Deferbaugh, CEO & Chairman  
Big River Resources, LLC

Fagen, Inc. is a civil, mechanical and electrical contractor specializing in heavy industrial construction and maintenance work serving customers throughout the United States. Our core competencies are civil, structural, siding, insulation, rigging, millwright, pipe, electrical and instrumentation services. We self-perform a majority of our work.

We are the largest merit shop contractor headquartered in the Midwest with resources to manage any size project. Fagen can mobilize on short notice for large shutdowns and emergency work.

With project management, design, estimating, scheduling, purchasing, direct hire and construction management capabilities, we can meet all project execution needs of our customers.

Fagen, Inc. owns and maintains most of the specialized equipment necessary to perform all phases of construction and maintenance work.

With the establishment of Fagen Engineering LLC in 1996, single source design, procurement and construction services can be provided.

We have consistently been listed among the Top 400 Contractors in the United States in the *Engineering News-Record* rankings. ENR's 2009 Top 400 Contractors ranks Fagen, Inc. at #37 overall. ENR's 2008 Top 400 Contractors ranks Fagen, Inc. at #30 overall. Fagen, Inc. was also ranked #9 in ENR's 2008 Top 100 Design-Build Firms, and number 98 in ENR's Top Contractors Worldwide. ENR's 2007 Top 400 Contractors ranks Fagen, Inc. at #48 overall. ENR's 2007 Top 500 Design Firms ranks Fagen, Inc. at #160. Fagen, Inc. was also ranked #39 among the top 250 design-build firms by *Design-Build Magazine*, the official magazine of the Design-Build Institute of America. In 2005, Fagen, Inc. was ranked #388 on the *Inc. 500* list for fastest growing, privately held companies. Also in 2005, Fagen Engineering LLC made its inaugural appearance on *The Zweig Letter Hot Firm List* and was ranked #4. In 2007 Fagen Engineering LLC was ranked 160th in *ENR Top 500 Design Firms*.

We are dedicated to providing the highest standards of safety, quality, efficiency and service. As a result, our customers receive the maximum benefit from their construction and maintenance dollars.



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## Company Profile

### ◆ MISSION STATEMENT

To be the construction company most admired by our customers for our people, partnerships, performance and finished product, ultimately building a better world for tomorrow

### ◆ CONSTRUCTION & MAINTENANCE CAPABILITIES

- Design-build services
- Project and construction management

#### Civil

- Grading, Excavation, Shaping
- Foundations: Building and Equipment, Floors, Slabs and Paving
- Special Structures
- Pre-Engineered Metal Buildings
- Structural Steel
- Architectural

#### Mechanical

- Piping: Stainless Steel, Carbon Steel, PVC, Ductile Iron
- Equipment Setting: Precision Millwright Work, Optical and Laser Alignment
- Approved for the following stamps: R, S, U
- CWI, ANSI Level II

#### Electrical & Instrumentation

- Switchgear, Motor Control Centers, Conduit, Cable Tray, Wiring
- Instrumentation – Calibration Installation & Tubing
- High Voltage: Transformers, Switchgear, Substations Wire (Install & Testing)
- Check out & startup services

#### Insulation

- Vessels
- Equipment
- Piping

*"Fagen's commitment to quality and willingness to do what it takes is impressive."*

*"They are a successful company that provides the best in design-build services and customer satisfaction."*

—Thomas E. Branham, CEO  
Glacial Lakes Energy, LLC  
& Granite Falls Energy, LLC



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# Economic Impact Analysis



## An Economic Impact Analysis

Prepared For



This project is sponsored in part by  
The Imperial Valley EDC and  
THE CALIFORNIA ASSOCIATION FOR LOCAL ECONOMIC DEVELOPMENT



Prepared by:

Solution Mountain, Inc.  
December 2010



## Summary of Economic Impacts

The Economic Impact Report (shown at Table 1 below) details the Project's one-time and on-going economic impacts. In summary, it is estimated that the construction and business-related activities will produce the following benefits:

- \$946 million in Gross Economic Output
- \$561.7 million in Gross County Product.
- \$333.7 million in Total Labor Income.
- 8,847 total jobs (full and part-time).
- \$181.6 million in Capital Income.
- \$46.3 million in Indirect Business Taxes and Fees.

**Five Year Benefit:** Over five years, the one-time economic benefits (\$625.9 million) when combined with the on-going annual benefits (\$1.6 billion) total more than \$2.2 billion.

# Why Domestically Produced Renewable Energy?

- ▶ If California imports 300 million barrels of crude in 2011, as expected, and the price for crude remains at \$90+ per barrel, California will send \$27+ billion overseas in 2011 alone - ***That amounts to \$850 every second***
- ▶ California's need for energy and its reliance on imported oil is causing the largest transfer of wealth in history

# CE+P Products are in Demand

- ▶ California's Current Fuel Blending Statewide is 10% Ethanol with Anticipation of it Eventually Increasing to 15%
- ▶ California's Low Carbon Fuel Standard
- ▶ California's Renewable Portfolio Standard (electricity)
- ▶ California's developing Cap & Trade program thru the California Air Resources Board

# Various Fuel Carbon Intensity

- ▶ CARBOB (w/10% ethanol blend) 96 g/MJ
- ▶ Midwestern Corn Ethanol (Coal Powered) 120 g/MJ
- ▶ Midwestern Corn Ethanol (Natural Gas Powered) 90 – 98 g/MJ
- ▶ California Corn Ethanol 80 g/MJ
- ▶ Brazilian Sugarcane Ethanol 58 – 74 g/MJ
- ▶ CE+P's Ethanol 15 g/MJ

# Recent Article



April 22, 2011

## .... The Price of Ethanol in the United States

You see, the price of ethanol in the United States is still below its peak in 2006. But it's been on a steady incline since January 2009, rising 54% to \$2.58 per gallon.

ADM is positioning itself to capitalize on surging global demand for biofuels. ***By 2020, the world's thirst for biofuels, like ethanol, will increase 133 percent. And projections are actually for an ethanol supply deficit of as much as five billion gallons by then.*** That means global ethanol supply shocks similar to what we saw in Brazil earlier this year when ethanol prices surged to record highs.

***With oil over \$100 per barrel and the price of gasoline nearing \$4 per gallon, expect the spotlight to get brighter on alternative fuels. The biofuels industry is still evolving and in its infancy commercially.*** The best part is that companies like ADM are well-diversified and insulated against any price volatility – or reduction of tax credits – that might plague their competitors.

# Market Pricing

082311\_Daily\_Market\_Overview.pdf - Adobe Reader

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\*\*\*ETHANOL: SPOT PRICES MARCH HIGHER INTO AFTERNOON

SPOT ETHANOL ASSESSMENT

Chicago	\$2.9100-\$2.9400
Chicago Rule 11	\$2.9300-\$2.9700
New York	\$3.0000-\$3.0300
Gulf Coast	\$3.0100-\$3.0300
Dallas	\$2.9500-\$2.9900
Tampa	\$3.0200-\$3.0600
Nebraska	\$2.7800-\$2.8300
Pac NW (1-5 days)	\$3.0100-\$3.0200
L.A. (90.1 1-5 days)	\$3.0300-\$3.0600
L.A. (98.4 1-5 days)	\$3.0250-\$3.0550
L.A. (90.1 6-15 days)	\$3.0200-\$3.0500
L.A. (98.4 6-15 days)	\$3.0150-\$3.0450

\$3.04 gallon

SPOT SME BIODIESEL ASSESSMENT

Chicago	\$5.4000-\$5.4700
Gulf Coast	\$5.4500-\$5.5200

ETHANOL RIN CREDITS

2010	\$0.0035-\$0.0040
2011	\$0.0330-\$0.0350
2012	\$0.0750-\$0.0850

CELLULOSIC RIN CREDITS

2010	\$1.1000-\$1.1500
2011	\$1.1200-\$1.1400

BIODIESEL RIN CREDITS

2010	\$1.6400-\$1.6800
2011	\$1.6800-\$1.7000

ADVANCED BIOFUEL RIN CREDITS

2011	\$1.1800-\$1.2500
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\$1.22 gallon

# Imperial County 2010 Summary

Commodity	Acreage	Value
Vegetable & Melon Crops	115,501	\$809,126,000
Field Crops	352,760	\$360,139,000
Livestock		\$321,022,000
Fruit & Nut Crops	7,104	\$51,294,000
Seed & Nursery Crops	53,969	\$52,952,000
<b>Totals</b>	<b>529,334</b> (2009: 536,209)	<b>\$1,598,534,000</b> (2009: \$1.453 Billion)

Source: Imperial County Agricultural Crop & Livestock Report 2010

# Imperial Valley USDA Greenhouse



# Planting the Fields



# Harvesting the Sugarcane



# Sugarcane (Sept 12, 2011)



# Sweet Sorghum (Sept 12, 2011)



# Imperial Field Crops

Crop	Acres	Tons Per Acre	Total Tons	Gross Value
Alfalfa	136,815	7.95	1,087,679	\$129,227,000
Bermuda Grass	48,726	7.01	341,569	\$39,574,000
Sudan Grass	59,403	5.93	352,260	\$46,600,000
<i>Sugarcane</i>	<i>41,343</i>	<i>47.0</i>	<i>1,943,120</i>	<i>\$92,840,668</i>
<i>Sweet Sorghum</i>	<i>32,708</i>	<i>33.0</i>	<i>1,079,359</i>	<i>\$46,164,398</i>
<b>Cane &amp; Sorghum</b>	<b>74,051</b>	<b>40.82</b>	<b>3,022,479</b>	<b>\$139,005,066</b>

Source (Alfalfa, Bermuda and Sudan): Imperial County Agricultural Crop & Livestock Report 2010

# Enterprise Zone

- ▶ Tax Benefits
  - Hiring tax credit
  - Sales and use tax credit
  - Net operating loss carryover
  - Business expense deductions
  - Lender interest income deduction
- ▶ Preference When Selling Products to the State
- ▶ Other Programs/Zones & Financing Options

# Imperial County Programs

## Manufacturing Enhancement Area (MEA)

Created by the State of California to stimulate job creation in areas experiencing triple the states unemployment rate. Benefits include:

- Streamlined local regulatory controls
- Reduced permitting fees
- Ability to receive \$30,000 or more in state hiring tax credits for qualified employees over a 5 year period

# Federal Government

CE+P is not relying on any governmental aid or assistance yet there may be access to funding from:

- U.S. Department of Agriculture (USDA)
  - Rural Development Programs
  - Biomass to Energy Programs
  - Biomass Crop Assistance Program (BCAP)
- U.S. Department of Energy (DOE)
  - Various energy programs they might develop
- U.S. Department of Defense (DOD)
  - Reduced the reliance of needing imported energy

# Project Finance

- ▶ CE+P will apply straight forward and time tested Project “non–recourse” Finance techniques:
  - Feedstock supply, cost and certainty
  - Cost and performance guarantees for the facility
  - Long term off–take contracts for our products with creditworthy parties
  - Possible floor pricing on the ethanol
  - Professional operations and maintenance program

# CE+P's Project Company Financing

<b>Total Project Financing</b>	<b>\$465,000,000</b>
<b>Senior debt through Bank of Brazil</b> (Senior debt: 70%~)	<b>\$325,000,000</b>
<b>Subordinated debt w/ commercial lenders</b> (Subordinated debt: 10%~)	<b>\$50,000,000</b>
<b>Project finance equity</b> (20%~)	<b>\$90,000,000</b>
<b>Additional Programs/Opportunities:</b> <ul style="list-style-type: none"><li>• USDA BCAP</li><li>• 1603 ITC Grant</li><li>• State &amp; Federal Grants</li><li>• Bonds</li><li>• EB-5 Program</li></ul>	<b>???</b>

# Development Funding

Description	Funding
Capital Raised To Date	\$6,500,000
Debt	\$4,000,000
Early Round Investment Still Available	\$500,000
Final Round Investment Required	\$5,000,000
<b>Total</b>	<b>\$16,000,000</b>

# CE+P Contacts

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