

ETHANOL AND AGRICULTURE: A NEW REVOLUTION

By Nancy Ervin, BP&F Business Consultant

Almost everywhere you turn these days, you see something in the news about ethanol. Thirty-three ethanol plants are under construction in the U.S., and another eight of the 95 plants in operation are being expanded, according to the Renewable Fuels Association. "It's a little bit of a dot-com atmosphere," says John Skelley, president of Arizona Grain, an equity partner in a new ethanol plant being built outside Phoenix.¹

Consider publicly traded Pacific Ethanol Inc. (PEIX). Ever since Bill Gates showed an interest in the industry eight months ago, PEIX has experienced a six-fold increase from a low of \$7.35 last fall to a high of \$42.00 this spring. Although PEIX is now trading around \$28.00, it is still considered one of the major investments to watch on Wall Street.

The ethanol sector's rapid ascent from a cottage industry to a robust source of renewable fuels has been called the greatest success story in modern agriculture.² It's easy to see why. The U.S. ethanol industry is expanding at a dramatic rate. In 2005, the industry produced just over 3.9 billion gallons of ethanol, nearly twice the amount produced in 2002. Some experts predict ethanol production will top nearly 10 billion gallons by 2015³ and as much as 60 billion gallons of ethanol will be needed by 2030.⁴

Given these projections, what kind of impact will the "ethanol revolution" have on agriculture?

If current corn yields remain steady, the ethanol industry could consume as much as 36% of total U.S. corn production by 2010, up from about 13.5 % last year.

Some economists fear that such an increase in demand will have a huge impact on the price

of corn, which will in turn increase the cost to produce livestock and dairy feeds. But not all economists are bullish on corn. Here's why:

- Researchers at Iowa State University are exploring the use of ultrasonics to boost ethanol production from corn. Preliminary tests have increased the corn's release rates of sugars by nearly 30%, promising a greater ultimate ethanol yield per bushel.

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- Economists with Purdue University Extension believe that the corn demand will be met by shifting acreage away from soybeans. Soybean price increases will be minimized by the increased supply of dried distillers grain (DDG), a by-product of dry mill ethanol processing. DDG is a primary substitute for soybean meal in dairy and cattle feeding.⁵
- Other researchers believe that as much as one-third of the ethanol production will be derived from cellulose feedstock, not corn, and that corn ethanol production has its limits, largely because of the number of by-products produced.⁶

One potential drawback of building a large demand base on new uses of corn is that technology breakthroughs or policy shifts can quickly drop demand to zero. For example, either a

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ENERGY REBATES AND CREDITS: HOW TO REDUCE UTILITY AND FUEL COSTS

By John Waymire

As a result of the repairs, electrical costs for operating the wells were reduced by \$120,000 per year.

The upcoming summer months will bring with them hot temperatures and poor air quality. To promote energy conservation and reducing air pollution, there are a wide variety of rebates and credits offered by utility companies, the California Energy Commission and the San Joaquin Valley Air Pollution Control District (SJVAPCD). Some rebates are highly promoted, while others are not well known.

Perhaps the most well known rebate program is the incentive offered by the SJVAPCD to take old diesel engines out of service and replace them with a cleaner burning, more efficient diesel or electric engine. Rebates for replacing irrigation pump engines can reach a maximum of \$25,000, while the rebate for tractors, backhoes and excavators can reach \$40,000. To qualify, the engines must be 50hp or greater in size and emissions must be reduced by 30% with the installation of the new equipment. Additional information about the program is available at www.valleyair.org.

A program offered by both PG&E and Southern California Edison (SCE) offers rebates of up to \$44 per acre for converting from high pressure sprinklers to drip irrigation. The drip systems must be installed in fields containing vegetables, trees, or vineyards. For trees and vineyards, the rebate is not available if the field is a new planting. Drip tape systems do not qualify for the rebate. Additional information is available at www.pge.com, www.sce.com, or by calling your utility provider.

Another program that offers rebates to reduce energy usage is the Agricultural Pumping Efficiency Program. This program was developed by the Center for Irrigation Technology at California State University, Fresno, to promote pumping plant efficiency and encourage energy conservation. When you contact

the program, they will set up a subsidized well efficiency test. This test will determine what improvements can be made to improve the pump efficiency, including repairing bowls and impellers or installing a throttling valve for an oversized pump. The program then offers rebates for making retrofits and improvements to increase efficiency (not for replacing pump engines). In a study in Tulare, five wells were repaired and modified with a total cost of \$105,000. The program gave rebates totaling \$53,000, bringing the net cost of the project down to \$52,000. As a result of the repairs, electrical costs for operating the wells were reduced by \$120,000 per year. For additional information regarding this program, visit www.pumpefficiency.org or call (800) 845-6038.

In 2005, the Energy Tax Incentives Act of 2005 was passed, which provides tax credits for energy saving projects. Tax credits of \$0.60 to \$1.80 per square foot are available for energy efficient commercial buildings. The rebates can apply to new building construction, improving existing building lighting, or HVAC systems. Also in the bill was a tax credit for investing in solar energy equipment. Qualified equipment can receive a tax credit of 30% of the cost. This bill also included credits for individuals, such as a 10% tax credit on energy saving home improvements, tax credits for replacing old appliances with new energy efficient models, and tax credits for the purchase of qualifying hybrid vehicles.

Before purchasing equipment or beginning a repair project you think might qualify for a rebate, contact the appropriate agency to ensure you meet all of their requirements. There are often multiple criteria that must be satisfied in order to qualify for the program's rebate or credit. Contacting the appropriate agency is also important because rebates are offered on a



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BP&F
**Ag Business
Award**
2006

The Baker, Peterson & Franklin Ag Business Award honors an organization whose achievements and impact have significantly contributed to the ag industry and the community.

Criteria

- Any for-profit agribusiness or farming entity based in the central San Joaquin Valley is eligible.
- Prior Baker, Peterson & Franklin Ag Business Award winners are not eligible.
- Self-nominations are encouraged.
- The award is bestowed annually at the Ag Awards Luncheon with the Greater Fresno Area Chamber of Commerce and Center for Agricultural Business at California State University, Fresno.
- Award recipient is selected by a committee of representatives from the BP&F Ag Department and local agribusiness community.
- Nominations submitted each year are considered in all following years.

Complete the form on the reverse side and mail or fax by July 31, 2006. For further information, please call:

Baker, Peterson, & Franklin, CPA, LLP
Julie Maldonado
Ag Business Award Selection Committee
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Fresno, CA 93711
Phone: (559) 432-2346 • FAX: (559) 432-5831
mail@bpfcpa.com



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Ag Business
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2006

Application

Name of organization: _____

Mailing address: _____

City: _____ Zip: _____ County: _____

Street address (if different from above): _____

City: _____ Zip: _____ County: _____

Phone: _____ Fax: _____

Chief Executive: _____ Title: _____

Contact person: _____ Title: _____

Year established: _____

Brief description of the company and its products or services: _____

You may use one sheet of paper to answer the following questions; attach the sheet to this application.
(Please be specific, list accomplishments, etc.)

1. Describe the organization's growth and success.
2. What are the contributions of the organization to the agricultural industry and our community?

Nominated by: (Optional)

Name: _____ Title: _____

Name of organization: _____

Address: _____

City: _____ Zip: _____

Phone: _____ Fax: _____

Only the application form and your one-page response to the above questions will be judged.
Deadline July 31, 2006.

STAFF NEWS

Baker Peterson & Franklin congratulates Linda Chin, CPA; Janell Attebery; Erin Tranbarger, CPA; Sally Galvins; and John Waymire. Linda has been promoted to Manager in the Tax Department, and has been with BP&F since 1997. She has worked with many agricultural clients providing a variety of services including financial statement preparation, tax planning, and tax return preparation. Janell and Erin were both promoted to Managers in the Accounting & Assurance Department. Janell joined BP&F in 2003 from Ernst & Young in San Jose. She works with a variety of agricultural clients and specializes in research & development credits. Erin joined BP&F in 2005 from PriceWaterhouseCoopers in Orange County. Sally has been promoted to a Senior II Accountant in the Tax Department. She has worked at Baker, Peterson & Franklin for over a year and has four years of public accounting experience. John was promoted to a Senior I Accountant in the Accounting & Assurance Department. He joined the firm in 2004 and, as a member of the Ag Department, specializes in working with agricultural clients.

We are pleased to announce the recent hiring of Kim Chu in the Bookkeeping Department. Kim graduated from California State University, Fullerton, with a degree in Business Administration, emphasis in accounting. She worked as an accountant for South Coast College for three years before moving to the San Joaquin Valley, and most recently was working at the IRS.



Ethanol and Agriculture – continued

drop in ethanol subsidies or a drop in the ethanol import tariff would greatly decrease ethanol demand. Another key concern is the distribution infrastructure, including pipelines to move ethanol and rail cars to move corn and distillers' grain.

I've even read that Iowa will have to import 150 million bushels of corn to feed their projected ethanol capacity this year.⁷ Iowa importing corn? We certainly live in interesting times.

¹ Woodyard, Chris, "Ethanol Plants See Growth Bloom," *USA Today*, March 12, 2006.

² "Ethanol, the Agriculture Success Store," *National Corn Growers Association*, www.ncga.com, June 14, 2005.

³ Woodyard, Chris, "Ethanol Plants See Growth Bloom," *USA Today*, March 12, 2006.

⁴ "Ethanol Could Shift U.S. Animal Production," www.agriculture.com, March 10, 2006.

⁵ "Ethanol Could Shift U.S. Animal Production," www.agriculture.com, March 10, 2006.

⁶ "Iowa Senator Calls for 60B-Gallon Renewable Fuels Standard by 2030," www.greencarcongress.com, May 11, 2006.

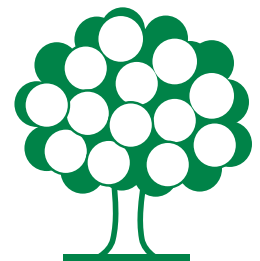
⁷ Babcock, Bruce, "Are More Livestock in Iowa's Future?" *Iowa Ag Review*, Fall 2005

Some experts predict ethanol production will top nearly 10 billion gallons by 2015 and as much as 60 billion gallons of ethanol will be needed by 2030.

Energy Rebates and Credits – continued

first-come, first-served basis. The agency will inform you if rebates are still available for a particular program. If you are unsure of where to begin to find rebates and credits, go to www.fypower.com. Your zip code will determine what rebates and credits are available and how to apply. Without spending much time, you can investigate and find possible rebates which could result in receiving thousands of dollars back for improvements—improvements that will reduce utility and fuel costs for future years.

If you would like further information, please call our office at (559) 432-2346.



CALENDAR

- July 3 & 4** Independence Day – BP&F office closed July 3rd and 4th
- August 8** Fresno State Grape Day – Fresno State Vineyards. Ticket information call (559) 278-2089.
- September 4** Labor Day – BP&F office closed
- September 10** Ag Boosters' Barbeque, Dennes Coombs' Ranch in Madera. Ticket information (559) 432-2346 or (559) 278-4266.
- September 15** Due date for 2005 tax returns for calendar year end corporations, including extension.
- September 27 & 28** 15th Annual Wine Industry Financial Symposium. Meritage Hotel in Napa. For information call (707) 255-9222
- October 15** Due date for 2005 individual tax returns, including extensions.
- October 27** Ag One Fresno-Madera Alumni and Friends Wine Tasting, California State University, Fresno Winery. Reservation information (559) 278-4266

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