Question and Answer

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*Bruce Comer is the founder and a managing director of Ocean Park Advisors of Los Angeles, CA (*www.oceanpk.com*), which calls itself "a boutique investment bank that advises on mergers and acquisitions (M&A), financings and restructurings with extensive experience in the renewable fuels, cleantech, food, and agribusiness industries." Ocean Park has completed more than 40 renewable fuels transactions since 2006.*

Comer has decades of experience advising boards, funds, owners, and lenders on growth strategies, capital structures, acquisitions, divestitures, restructurings, and operational issues. Prior to founding Ocean Park in 2004, he was a principal at Platinum Equity, where he played a key role in raising the firm's $700 million fund and actively managed the firm's $4 billion revenue portfolio. He also previously served as the chairman and CEO of Allegro Biodiesel, a publicly-traded company.

He has published articles in industry journals and appeared at conferences and on CNBC to discuss renewable fuels.

He replied by email to questions from BioFuels Journal *about mergers and acquisitions in the ethanol and advanced biofuels industries.*

The M&A Market

For the second straight year, the North American biofuels industry experienced year-over-year growth in merger and acquisition (M&A) transactions in 2016. In total, the 12 transactions in 2016 were worth an estimated $450 million to $500 million and involved 14 plants with almost 700 million gallons a year (MMGY) of production capacity. A higher than normal proportion of deals occurred in the biodiesel industry, which accounted for seven of the 12 transactions. In addition, in the advanced biofuels category, there were five acquisitions, which was an increase from 2015, when there were four.

While valuations were modest, bankruptcy and plant retrofitting and repurposing largely drove M&A transactions in 2016. Buyers were driven to opportunistically add scale as sellers had to close deals.

Abengoa Fallout

The breakup and sale of Abengoa's portfolio of its North American renewable fuels assets served as the impetus for more than half of the 2016 M&A

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Comer Close-Up

Education: 1987: Bachelor's degree, cum laude, the Woodrow Wilson School of Public and International Affairs at Princeton University, Princeton, NJ. **1997**: Master's degree with distinction in International Relations, Johns Hopkins University/SAIS, Washington, DC. **1996:** MBA in Finance, The Wharton School, University of Pennsylvania, Philadelphia, PA.

Family: Wife, Helen Lee. Two sons: Walter, 5, and Will, 2.

Career: 2004 to present: Founder and managing director, Ocean Park Advisors, Los Angeles, CA. **2003 to 2004:** Senior vice president, Platinum Equity, Los Angeles, CA. **2006-2009:** Chairman and CEO, Allegro Biodiesel, Los Angeles, CA.

Hobbies: Backpacking in national parks, endurance sports, running in Los Angeles's Griffith Park, and playing outside with my sons.

transactions in terms of volume, capacity, and transaction value. Abengoa, the Spanish renewable energy company, sold six ethanol plants and its cellulosic ethanol plant in Hugoton, KS. On the buy side, Green Plains Inc. was active once again in 2016 by acquiring three of Abengoa's plants. The acquisition of the three plants makes Green Plains the third-largest ethanol producer in the United States.

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M&A in 2016

Over the past five years, the total amount of ethanol production capacity acquired through M&A transactions has averaged more than 500 MMGY of annual production capacity. (See the chart at the bottom of the page.)

The five transactions in 2016 included seven plants with a total of 426 MMGY of capacity. They were:

- Chief Ethanol Fuels, Inc., a unit of Chief Industries, purchased in May 2016 substantially all the assets of the Cornhusker Energy ethanol plant in Lexington, NE, which became Chief Industries' second plant in Nebraska.
- In August 2016, Green Plains Inc. purchased three ethanol plants from Abengoa Bioenergy conducted under the provisions of the U.S. Bankruptcy Code.

The company purchased the Madison, IL; Mount Vernon, IN; and York, NE ethanol facilities with a combined annual production capacity of 236 MMGY for approximately $237 million in cash, plus certain working capital adjustments.

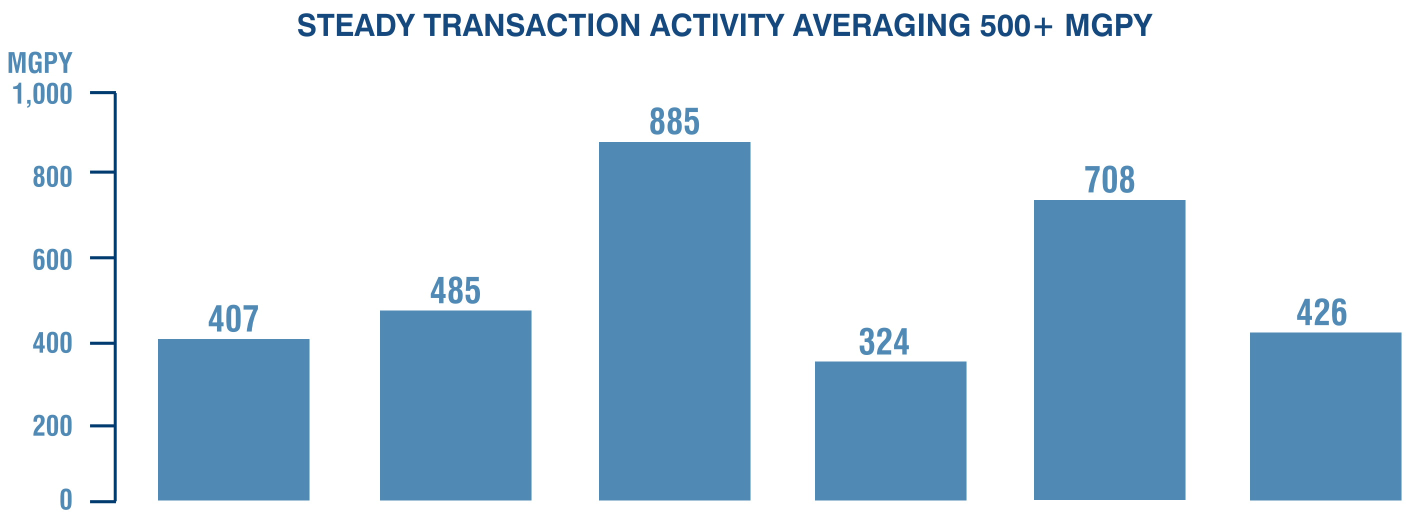
- KAAPA Ethanol, LLC of Minden, NE acquired Abengoa's Ravenna, NE plant, also through the bankruptcy process, for $115 million in August 2016. The plant became KAAPA's second wholly-owned plant.
- ICM, Inc. of Colwich, KS acquired Abengoa's Colwich, KS ethanol plant in a bankruptcy process for $3.1 million. The 25-MMGY plant had been idled by Abengoa.
- Natural Chem Group, LLC of Houston, TX acquired Abengoa's Portales, NM asset. The non-operating plant is likely destined to be re-purposed as a transload and distribution terminal.

Two things drove the M&A market in 2016:

Distress. In the case of the Abengoa assets, the sale in U.S. bankruptcy court of the seven ethanol plants was caused more by corporate financial pressures on Spanish renewable energy firm Abengoa SA, which owned the seven ethanol plants, rather than the micro-economics of the U.S. ethanol market.

Consolidation. Because all of the acquirers of the operating plants already owned ethanol facilities, ethanol plant buyers remain a small club. Since 2009, five buyers have accounted for 78% of the capacity that has traded in the ethanol industry.

NORTH AMERICAN ETHANOL M&A, 2011-2016



	2011	2012	2013	2014	2015	2016
Plants Acquired	5	7	13	4	8	7
Transactions	4	7	10	4	5	5

Source: Ocean Park Advisors

2016 NORTH AMERICAN BIOFUELS M&A

DATE CLOSED	TARGET	ACQUIRER	INDUSTRY	ANNOUNCED CAPACITY (MGPY)	TRANSACTION VALUE ($M)	$/GALLON
January	Greenleaf Biofuels	Kolmar Group	Biodiesel	15	-	-
March	Sanimax Energy	REG	Biodiesel	20	$19	$0.97
May	Cornhusker Energy	Chief Ethanol	Ethanol	50	-	-
June	Terra Biodiesel	High Plains Bioenergy	Biodiesel	15	-	-
June	Methes	BIOX Corp	Biodiesel	13	$5	$0.35
June	Green Earth Fuels	BIOX Corp/World Energy	Biodiesel	90	$20	$0.22
August	Elevance Renewable Sciences	World Energy	Biodiesel	72	-	-
September	Abengoa (Madison/Mt. Vernon/York)	Green Plains	Ethanol	236	$237	$1.01
September	Abengoa (Ravenna)	KAAPA	Ethanol	90	$115	$1.28
November	Abengoa (Colwich)	ICM	Ethanol	25	$3	$0.13
November	Abengoa (Portales)	Natural Chem Group	Ethanol	25	-	-
December	Delta American Fuel	Agritrade Resources/ Solfuels Holdings	Biodiesel	40	$6	$0.15
TOTAL				691		

Source: Ocean Park Advisors

Advanced Biofuels

Ocean Park tracked five M&A deals in advanced biofuels during 2016. Most of these transactions were part of a wind-down process or occurred in place of a financing event.

As in the ethanol industry's M&A activity, Abengoa's bankruptcy was central to the deal flow in advanced biofuels in 2016. Abengoa sold its non-operating cellulosic ethanol plant in Hugoton, KS to Synata Bio of Illinois for $48.5 million in another U.S. bankruptcy court action.

Tesoro Corp. of San Antonio,TX expanded its advanced biofuels capabilities by acquiring Madison, WI-based Virent's bio-based fuels and renewable chemicals demonstration plants and technology.

The European company GFBiochemicals acquired the assets of Segetis, a Golden Valley, MN-based renewable chemical company.

The algae company Joule Unlimited of Boston, MA merged with Red Rock Biofuels, a renewable fuels developer based in Fort Collins, CO.

Finally, industrial biotech conglomerate Aemetis, which owns an ethanol plant in Keyes, CA and an integrated fuels and chemical production facility in Kakinada, India, struck a deal to acquire Edeniq,Inc., a cellulosic ethanol technology provider based in Visalia, CA.

More Consolidation

Because the U.S. ethanol industry is still relatively fragmented, Ocean Park expects consolidation to continue.

There are still 95 stand-alone plants that account for 5.5 billion gallons per year (BBGY) of production, which represents 37% of the 15.1 BGPY of U.S. ethanol production.

Margins were fairly robust in 2016, so most owners were content to hold onto their assets. The industry also rang up record production during 2016.

If M&A ramps up in 2017, it will likely be more scattered because there is not another Abengoa break-up on the horizon, although ADM is exploring strategic alternatives for its large fleet of dry mill ethanol plants.

Funding for advanced biofuels, such as cellulosic ethanol, was scarce in 2016. Hence, many players were under financial pressure. Another year of low crude prices would make it difficult to validate business models.

As in 2016, Ocean Park expects advanced biofuels companies that are unable to stretch funding or raise new capital to seek mergers or sales in 2017.

All eyes will be on Washington, DC as the Trump Administration and the new Congress set a new course for the U.S. Environmental Protection Agency (EPA), the Renewable Fuel Standard (RFS2), and for tax and trade policies.

The Biodiesel Blenders Tax Credit expired at the end of 2016, so that will be a key factor affecting production economics. The question is whether the uncertain policy environment or possible regulatory headwinds compel non-strategic asset owners to consider exiting their investments.

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