Downstream BUSINESS

INDUSTRY & FACILITY

Ethanol Movements

By Bryan Sims.



The U.S. ethanol industry experienced a kind of "renaissance" year in 2014 due to a convergence of factors such as higher-than-normal Renewable Identification Numbers, a favorable projected corn harvest and low corn prices bringing about favorable crush margins that, as a result, have allowed producers

to reinvest in their distilleries to improve operational efficiencies.

Those reaping the benefits of peak performance were riding high, but those struggling financially might be potential acquisition targets by industry players with a more robust balance sheet. This suggests that an uptick in merger and acquisition (M&A) activity may be nearing, according to Christopher Wu, partner at Carl Marks Advisory Group and co-leader of the firm's energy practice in New York City.

Speaking with Hart Energy's *FUEL*, Wu said: "I think what that does is it strengthens the resolve of the well-capitalized consolidators to continue the process of consolidating the ethanol industry bringing more operational discipline and capital discipline to the industry and a continuing trend of both 50- to 100-million-gallon-per-year Delta-T/Fagen plants being selectively acquired by the majors, which include Valero Energy, Green Plains and Flint Hills Resources," Wu said.

He further explained, "The ethanol industry has to demonstrate that it's viable every few years when there's a shortage of corn and the prices go up and people start criticizing the industry. But, I think the amount of cash flow the industry has generated this year is extremely favorable for future investment."

Wu pointed out that those favorable margins that ethanol producers have enjoyed for the better part of 2014 have since been compressed, particularly after the U.S. Labor Day holiday in September, as the price of gasoline has decreased and, correspondingly, the price of ethanol has come down even while the price of corn has remained low. "When margins have been so high for so long a lot more supply has come on the market, which is pretty typical for commodity chemicals like ethanol. That's how the cycle works," Wu said.

Historically, Wu characterized overall investment in the buildout of first- and second-generation biofuel projects to be "spotty" and "project-specific," particularly since the fallout of the financial crisis of 2008 to 2010. "In aggregate, I would say it's not as robust as it was five or six years ago," Wu said.

"A lot of that has to do where crude oil and natural gas are right now... it is sort of the overbuilding due to the RFS [Renewable Fuel Standard] during that period of time and all commodities rising at an unnatural, cyclical high prior to the financial crisis of 2008, which was driven by demand from China. When you have commodities spiking, people naturally look to develop alternatives as hedges," he noted.

In 2014, five different companies, including Bunge and Murphy USA, publicly announced they have divested in their respective corn-ethanol production assets, which have become prime acquisition candidates for suitors to make upgrades or repurpose them into better-performing assets that can use a range of feedstocks to produce a host of end-products.

Those that had publicly announced they had acquired ethanol-producing assets in 2014 include CHS Inc. and Flint Hills Resources.

Nevertheless, there remains a clear trend that major energy companies will continue to keep a close eye on how the ethanol industry performs this year heading into 2015 and beyond, according to Scott McDermott, partner for Greenwood Village, Colo.-based financial advisory firm Ascendant Partners, whose clients include independent ethanol producers.

"The reality is that these [ethanol] facilities are biorefining platforms. These facilities are well-positioned to continue to enhance value-added agriculture-to-product opportunities, and we believe that really hasn't even started yet," McDermott told *FUEL*.

"It's not only the normal, traditional commodity consolidation to some degree, but then it's also differentiated opportunity. We think that the small, competitive, better company can compete in that world," McDermott said, adding that the firm doesn't subscribe to the idea that "bigger is always better" when it comes to independent ethanol producers trying to survive in an ever-volatile, ever-evolving industry.

"We don't necessarily think it's just the agriculture or energy majors [dominating M&A activity in the ethanol industry]; we think that some of these guys will come from the bottom up too," McDermott noted.

To stay competitive, many independent ethanol companies participate in very detailed operational and financial improvement initiatives where firms like Ascendant Partners collect facility data and then perform benchmarking analysis and conduct quarterly discussions with management and boards of directors to see where improvements can be made.

"Most of our independent investors and boards come from commodity industries so they get that the industry is volatile and you always must be getting better or you end up falling behind," McDermott said.

The opposite holds true for those that may not be financially, geographically or operationally equipped to weather periods of hardship in order to stay competitive, according McDermott.

"For the guys who fall asleep at the wheel, if they're not staying in a competitive position, at some point in these volatile markets they'll be taken out. That's really where the consolidation is typically driven; during these distressed periods," McDermott said.

Diversification key

Because biofuels, broadly speaking, have experienced ups and downs, entrepreneurs are constantly looking to repurpose their ethanol assets, according to Wu. Therefore, some of them are reformulating to toggle between producing ethanol and producing specialty chemicals like butanol, which requires some investment dollars in retrofitting, but the technology is there. Wu cited companies like Gevo and Butamax Advanced Biofuels employing such strategies.

"This just assists the industry in having a high utilization capability and helps attenuate the volatile cycle of being tied to one input based on the commodity pricing of just one output," Wu said.

McDermott agreed, pointing out that diversification of an ethanol facility's feedstock slate, as well as end-products other than exclusively ethanol, will be an important factor for the industry to consider going forward this year heading into 2015.

Historically, McDermott explained, U.S. ethanol processing margins have been driven by supply and demand fundamentals in ethanol, energy and corn, plus feed and policy impacts. As more ethanol companies diversify, the economic incentives to expand or contract production change over time. For a growing number of ethanol companies, at least part of production decisions will be based on considerations outside their core ethanol-making business.

"The other diversification activity that is occurring by ethanol producers is the leveraging of the infrastructure and assets. The industry has built a lot of robust infrastructure

around these plants that can be levered to do a lot of things. We see guys capitalizing on that and have done so for years," McDermott said.

Wu concluded that all commodity chemical industries—like ethanol—consolidate over time that eventually leave geographically disadvantaged, operationally disadvantaged and capital-disadvantaged producers to be winnowed out, merged, consolidated or closed.

"What you end up getting is a more disciplined industry that's significantly consolidated that can attenuate the production throughout the cycle, make money, and then it becomes valued more on a cycle average, EBITDA-type profile," Wu said.

Looking ahead

While consolidation is an inherent and inevitable dynamic in the U.S. corn-ethanol industry, Wu asserts that a potential reduction in the 2014 renewable volume obligation ruling under the RFS could potentially exacerbate the trend in 2015 and beyond.

Issued in November 2013, the U.S. Environmental Protection Agency (EPA) proposed to cut—for the first time since the RFS was first enacted into law in 2005 and subsequently expanded in 2007 (hence RFS-2)—total biofuels to be blended into gasoline and diesel in 2014 to 15.21 billion gallons, down 16.2% from the statutory 18.15 billion gallons originally mandated under law.

The EPA sent the final 2014 RFS targets to the White House Office of Management and Budget for interagency review in late August. At press time, the EPA had yet to issue a final rule.

"The RFS ruling could have an impact accelerating this dynamic of consolidation, but it's still part of an ongoing, inexorable trend anyway," Wu said.

If the 2014 RFS rule does in fact reduce the amount of how much U.S. corn-ethanol can be produced and consumed to satisfy the U.S. mandate, Wu said the majority of those gallons will likely need to go to the export market, which has seen healthy demand throughout 2014 and is expected to carry over into 2015.

"There certainly has been a demand, but the demand for [ethanol] exports has everything to do with Brazilian sugar cane-ethanol production and other dynamics in other markets. Those are global factors that are difficult to predict," Wu said.

"That's a significant factor, and it will probably create, on the margin, more [U.S. cornethanol] consolidation," Wu said, adding that the inexorable march of large, diversified

and well-capitalized companies will likely continue to add gallons onto their respective platforms.

Another means of shoring up a potential gap of corn-ethanol under the RFS could be filled from the development and deployment of second-generation biofuels, such as cellulosic ethanol, biodiesel or hydrotreated vegetable oil for renewable diesel, or even renewable natural gas (i.e. biogas), according to Wu.

He said that some companies—like Abengoa, POET, DuPont, Neste Oil and others—are already seizing on the opportunity with several already operational or either under construction.

"I think over time there's enough capital allocated to that development that you will see the emergence of advanced biofuels being viable and more economically sound and create a real alternative to existing fuels," Wu said.

"Over the next decade we're going to see some significant breakthroughs on the nextgeneration front. It's still a race for the most viable technologies to address that opportunity. That's where some exciting new developments are expected," Wu noted.

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