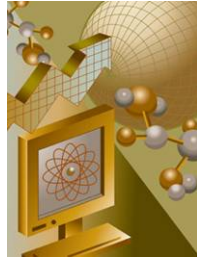


March 26, 2007

ALTERNATIVE ENERGY

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**ETHANOL: WHAT TO LOOK FOR IN CORN PLANTING ESTIMATES – 93 MILLION ACRES**

**Investment Conclusion:** The USDA's quarterly Grain Stocks and Prospective Plantings reports should give investors a good view into the likely corn harvest this year. We believe that the March 30<sup>th</sup> Prospective Plantings reports need to indicate that 93.2 million acres of corn are expected to be planted for the price to remain at the \$4.10 level. This would represent a 19.5% increase in corn acreage over 2006. Additionally, this estimate is 6.6% higher than the mid-point of what VeraSun is expecting for corn acreage in 2007 (87.5 million acres). Higher corn prices would be bad for both Hold rated VeraSun (VSE) and Sell rated Pacific Ethanol (PEIX), in our view. We are concerned that a jump in corn acreage planting plans will likely be below this expected level, which would be bullish for corn prices.

- **The University of Illinois estimates that 12.5 billion bushels of corn are needed to keep prices from rising.** University of Illinois corn expert Gary Schnitkey published his estimate of needed corn in January. In his analysis, he used 155 bushels/acre, which he described as "healthy." If one used the average 2006 yield of 149 bushels/acre, the needed acreage increases from 87.8 million acres to 93.2 million acres. Given the recent erratic weather and outlook for continued variability, we believe that a yield like last year's is more realistic.

University of Illinois	12,500 bushels need (millions)
Average 2006 Yield	149 bu/acre
	<hr/>
	83,893 acres harvested
	90% of planted acres are harvested
	<hr/>
	93,214 planted acres needed

- **Planting corn after corn (rather than corn after soybeans) could raise the corn output in 2007, but could create operational issues.** Bug and disease problems in the first crop would have a higher chance of impacting the second. In general, corn harvesting is slower, so timing is critical and can be exacerbated by difficult weather.
- **We believe corn plans (and thus soybean, wheat, and other grain plans) are beginning to take on general interest by the public.** Recent warnings from two University of Minnesota economists (Runge and Senauer) about rising food costs have hit the popular press. Due to the ethanol demand for corn (projected to be 35% of the harvest within a few years), Runge and Senauer now see corn prices up 20% by 2010 and 41% by 2020. Just 4 years ago the same team saw grain prices falling. They cite the recent problems with tortilla prices in Mexico as a good example of the type of problem we might see. We don't see politicians changing their views on ethanol subsidies, however, this is something to watch. Cellulosic ethanol would seem to solve this issue.
- **We are not changing our estimates or investment theses for VeraSun or Pacific Ethanol.** We maintain our Hold rating on VeraSun (VSE) as the story is well known and we believe commodity prices are likely to move against the company over 2007. We reiterate our Sell rating on Pacific Ethanol (PEIX) and \$11 price target based on 17x our 2008 EPS estimate. We are concerned that Pacific Ethanol is valued too highly for the likely commodity price environment in 2007.

Please see the [Important Disclosures Section](#) at the end of this report.

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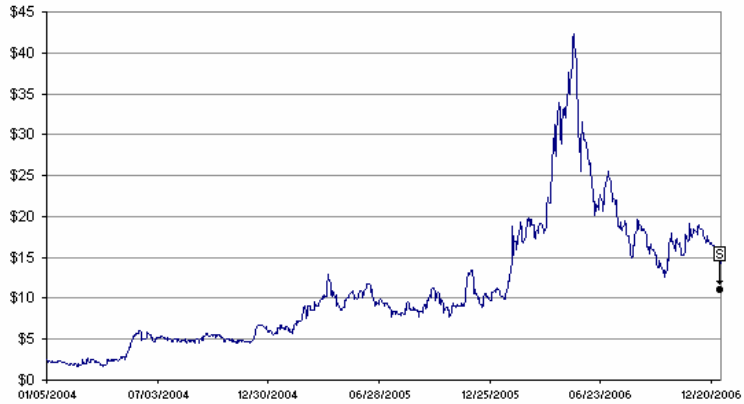
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**PEIX Stock Performance and Ratings & Price Targets  
(as of 01/08/07)**

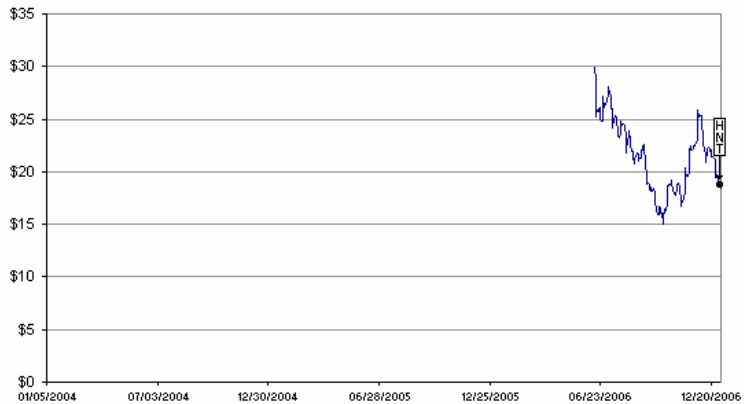


Date	Rating	Target
1/4/2007	SELL	\$11.00

<input type="checkbox"/> Buy	<input type="checkbox"/> Buy Select List	<input type="checkbox"/> Buy No Target	<input type="checkbox"/> Hold	<input type="checkbox"/> Hold Select List	<input type="checkbox"/> Hold No Target	<input type="checkbox"/> Sell	<input type="checkbox"/> Sell Select List	<input type="checkbox"/> Sell No Target
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*Sources: WR Hambrecht + Co, Factset*

**VSE Stock Performance and Ratings & Price Targets  
(as of 01/08/07)**



Date	Rating	Target
1/4/2007	HOLD	No Target

<input type="checkbox"/> Buy	<input type="checkbox"/> Buy Select List	<input type="checkbox"/> Buy No Target	<input type="checkbox"/> Hold	<input type="checkbox"/> Hold Select List	<input type="checkbox"/> Hold No Target	<input type="checkbox"/> Sell	<input type="checkbox"/> Sell Select List	<input type="checkbox"/> Sell No Target
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*Sources: WR Hambrecht + Co, Factset*

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## MARKET MAKING AND INVESTMENT BANKING DISCLOSURES

At the time this report was published, WR Hambrecht + Co made a market in the securities of Pacific Ethanol, Inc. (PEIX)

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Rating	Definition	% of companies under coverage with this rating	% for which Investment Banking services have been provided in the previous twelve months
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HOLD	Stocks rated Hold are those stocks we would continue to hold in our portfolio; these stocks are expected to appreciate or depreciate in absolute dollar terms less than 10% over the next 6 months.	37	7
SELL	Stocks rated Sell are those we would be actively selling; these stocks are expected to depreciate in absolute dollar terms at least 10% over the next 6 months.	4	0

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Investment risks associated with the achievement of the price target include, but are not limited to, the company's failure to achieve our earnings and revenue estimates, unforeseen macroeconomic and/or industry events that adversely impact demand for the company's products or services, product obsolescence, changes in investor sentiment regarding the specific company or industry, intense and rapidly changing competitive pressures, the continuing development of industry standards, the company's ability to recruit and retain competent personnel, and adverse market conditions. For a complete discussion of the risk factors that could affect the market price of the company's shares, refer to the most recent form 10-Q or 10-K that the company has filed with the SEC.

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## VALUATION METHODS TO DETERMINE PRICE TARGET

Our Pacific Ethanol (PEIX) \$11 price target is based on 17x our 2008 EPS estimate.

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