LyondellBasell sees advanced recycling as option for future of Houston refinery

By Emily Burleson — Reporter, Houston Business Journal

Aug 2, 2022

Despite sustained growth in profits at the company’s Houston refinery, new CEO Peter Vanacker said on July 29 that LyondellBasell Industries NV (NYSE: LYB) would stay the course with its plan to shut down the century-old facility by the end of 2023.

Former Neste Corp. President and CEO Vanacker joined LyondellBasell and took up the CEO mantle July 1.

Higher profits at the Houston refinery played a role in the company’s second-quarter earnings surpassing analysts’ expectations. The segment’s EBITDA, or earnings before interest, taxes, depreciation and amortization, was $418 million in the second quarter, more than double the first quarter refining EBITDA of $148 million, according to LyondellBasell’s financial statements.

LyondellBasell estimates it would take at least $1 billion in maintenance projects and unit turnarounds to bring the 268,000-barrels-per-day refinery back into shape if it continued operating into 2024, Vanacker said.

“My experience is actually telling me: The moment you open up a reactor, you start finding out that actually your $1 billion will not be sufficient, and it’s going to be substantially higher in terms of the investments in the refinery,” Vanacker said.

LyondellBasell tried to sell the refinery but failed to find a buyer. Now the company is evaluating what it can do with its prime real estate along the Houston Ship Channel. One option is “very large investments” that would expand LyondellBasell’s advanced recycling capacity, Vanacker said. Advanced recycling, also known as chemical recycling, is an umbrella term for processes that reduce
mixed, typically hard-to-recycle plastics down to monomer feedstocks, which can then be used to make new, virgin-quality plastic.

Interim CEO Ken Lane had alluded to similar plans in May during the first-quarter earnings call with investors.

“We’re going to take the next several years to study where we think that could go, and we think we can find some good value in that site for the mid- to long-term,” Lane said at the time regarding the refinery site.

The longer-term future of plastics recycling lies, in part, with molecular recycling, and LyondellBasell is researching how that might be done at a larger scale now, then-CEO Bhavesh V. "Bob" Patel said in March 2021. Earlier this year, LyondellBasell and Exxon Mobil Corp. (NYSE: XOM) announced a partnership with other companies and the city of Houston to increase local recycling rates.

Meanwhile, the company’s new chemical plant at its Channelview Complex, which will produce propylene oxide and tertiarybutyl alcohol or PO/TBA, will be finished with construction and starting up operations in the first quarter of 2023, said Torkel Rhenman, LyondellBasell’s executive vice president of intermediates, derivatives and refining.

The $2.4 billion-plus project is LyondellBasell’s largest greenfield investment to date, Rhenman said. The company made a final investment decision to build the PO/TBA plant back in 2017.

LyondellBasell made more than $1.64 billion in net income during the quarter, or $4.98 in diluted earnings per share, up 24.5% from the first three months of the year, when the company brought in $1.32 billion in net income, or $4 per share. When excluding adjustments for "lower of cost or market" and a $69 million non-cash impairment charge related to the exit from the company's Australian polypropylene business, the second quarter's adjusted net income was $1.7 billion, or $5.19 per share.

Both Q2 earnings figures easily surpassed analysts' average expectation of $4.66 per share, per Yahoo Finance.