



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

May 7, 2014

Via E-mail

Karyn F. Ovelmen
Chief Financial Officer
LyondellBasell Industries N.V.
1221 McKinney Street, Suite 300
Houston, Texas 77010

**Re: LyondellBasell Industries N.V.
Form 10-K for Fiscal Year Ended December 31, 2013
Filed February 20, 2014
Definitive Proxy Statement on Schedule 14A
Filed March 24, 2014
File No. 1-34726**

Dear Ms. Ovelmen:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2013

General

1. In future filings, where appropriate, please include a more fulsome description of your ability to pass along increases in the cost of raw materials to your customers. While we note that you state in Risk Factors that you are not always able to do so, your ability to do so is not addressed. Similarly, you disclose on page 44 that you are able to change the mix of raw materials in your American ethylene production operations, but do not address whether you are able to pass along increases in costs as well.

Risk Factors, page 22

2. In future filings, please include a risk factor discussing the risks posed by your outstanding debt. We note that on December 31, 2013, you had \$5.78 billion of long term debt

outstanding. Please also describe the impacts that the covenants you discuss on page 92 have on your business.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 39
Results of Operations, page 40

3. We note your disclosure at the bottom of page 29 of your 2013 Form 10-K that there is uncertainty associated with your O&P-EAI operations, as the European Commission is investigating whether reductions granted on a surcharge for financing should be recovered and/or curtailed. Please provide draft disclosure to be included in future filings that provides investors with information regarding the extent to which these reductions positively impacted the periods presented. Please also confirm to us that you will provide investors with information regarding material, known uncertainties that are reasonably likely to materially impact your future operating results and financial condition. Please refer to Item 303(a)(3)(ii) of Regulation S-K and Sections 501.12.b.2 and 501.12.b.3 of the Financial Reporting Codification for guidance.
4. We note your disclosure on page 54 of the 2013 Form 10-K that there were operating issues at the Houston refinery at the end of 2013 caused a temporary increase in the purchase of intermediate feedstocks, which negatively impacted accounts payable. We further note James L. Gallogly's discussion during the fourth quarter of fiscal year 2013 earnings call that the operating issues in your cokers during December 2013 negatively impacted your operating results by approximately \$40 million, as compared to operating income of \$22 million for the Refining Segment. As such, it is unclear why there is no direct mention of these operating issues along with the impact to the fourth quarter of fiscal year 2013 and that there is uncertainty associated with the impact to the first quarter of fiscal year 2014 operating results. Please provide draft disclosure to be included in future filings that includes discussion of the above issue as well as quantification of the impact to your operations and financial statements and discusses the uncertainty of future impact in accordance with Items 303(a)(3)(i) and 303(a)(3)(ii) of Regulation S-K and Section 501.12.b. of the Financial Reporting Codification for guidance.
5. Please include a discussion of the cost of sales for your technology segment in future filings. While you address the lower research and development costs in 2013, it is unclear how much of your research and development costs in 2013 were incurred by the technology segment.

3. Discontinued Operations and Related Items, page 82

6. We note that the sale of the Berre refinery in France has not been sold. Please confirm to us that the carrying value of the refinery is \$0, or tell us why you have not included the carrying value of the refinery in your table of the associated assets and liabilities on page 83 of the 2013 Form 10-K. If the carrying value is other than \$0, please tell us the amount.

17. Incentive and Share-Based Compensation, page 115

7. We note your disclosure that the expected term of your options is determined using the simplified method. Please explain your basis for using the simplified method, specifically addressing how you determined that there was not sufficient historical data in determining your expected term. In this regard, we note that approximately 3.2 million options have been exercised during the past three years. Further, tell us what consideration was given to including the disclosures required by SAB No. 110 when using the simplified method, including the reason why the method was used, the types of share option grants for which the method was used if the method was not used for all share option grants, and the periods for which the method was used if the method was not used in all periods.

Definitive Proxy Statement on Schedule 14A
Compensation Discussion and Analysis, page 27

8. We note your statement on page 31 that you target compensation at the median of your peers. Please disclose how each named executive officer's actual compensation compared to his peers. Please see comment 13 of our letter dated July 19, 2011. Please provide similar information for the target bonuses for your STI program, referred to on page 36.

Annual Bonuses ("STI"), page 36

9. We note your reference to HSE, EBITDA, and Costs goals in calculating your Corporate Scorecard. Please quantify and disclose the targets and actual results achieved for each of these measures. We note that in your Form S-4 filed June 22, 2011, you provided you these goals and presented a thorough discussion of the Compensation Committee's reasoning in determining appropriate payout levels.

Summary Compensation Table, page 50

10. You do not discuss the awards granted in conjunction with the 2012 special dividend or the significant drop in stock awards and other compensation from 2011 and 2012 to 2013. Please ensure that in future filings you discuss the reasons for significant changes in compensation amounts. Please see Item 402(a)(ix) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

Ms. Ovelmen
LyondellBasell Industries N.V.
May 7, 2014
Page 4

- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tracey Smith, Staff Accountant, at (202) 551-3736, or in her absence, me, at (202) 551-3854, if you have questions regarding comments on the financial statements and related matters. Please contact Leland Benton, Staff Attorney, at (202) 551-3791, or in his absence, Jay Ingram, Legal Branch Chief, at (202) 551-3397, with any other questions.

Sincerely,

/s/ Melissa N. Rocha

Melissa N. Rocha
Senior Assistant Chief Accountant