Cautionary Statement

• The information in this presentation includes forward-looking statements. These statements relate to future events, such as anticipated revenues, earnings, business strategies, competitive position or other aspects of our operations or operating results. Actual outcomes and results may differ materially from what is expressed or forecast in such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Factors that could cause actual results to differ from forward-looking statements include, but are not limited to, availability, cost and price volatility of raw materials and utilities; supply/demand balances; industry production capacities and operating rates; uncertainties associated with worldwide economies; legal, tax and environmental proceedings; cyclical nature of the chemical and refining industries; operating interruptions; current and potential governmental regulatory actions; terrorist acts; international political unrest; competitive products and pricing; technological developments; the ability to comply with the terms of our credit facilities and other financing arrangements; the ability to implement business strategies; and other factors affecting our business generally as set forth in the “Risk Factors” section of our Form 10-K for the year ended December 31, 2011, which can be found at www.lyondellbasell.com on the Investor Relations page and on the Securities and Exchange Commission’s website at www.sec.gov.

• This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change. We undertake no obligation to update the information presented herein except as required by law.
Last Year We Said: The Stars are Aligning for a Bright Tomorrow

- **Positive macro factors**
  - Global GDP
  - Asian development

- **Supply trends**
  - Limited construction
  - Limited Middle East gas avails
  - Existing asset reliability

- **U.S. natural gas**
  - A Middle East analog
  - Fractionator construction
  - Elevated crude oil price

These trends plus two key factors continue to define industry and regional profitability:
- **Regional Raw Material Costs**
- **Global Supply / Demand**
With Supply/Demand Still Recovering, Natural Gas versus Crude is Currently the Dominant Factor

Raw material factors define regional competitiveness

Source: CMAI
Both Natural Gas and Crude Prices have Contributed to Differential Performance in the US Ethylene Industry

Crude price increases have been as much a factor as have US natural gas price declines.

<table>
<thead>
<tr>
<th></th>
<th>1H'09</th>
<th>Q1'12</th>
<th>Delta</th>
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<tbody>
<tr>
<td>Ethane-based (US)</td>
<td>20</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Naphtha-based (US)</td>
<td>35</td>
<td>54</td>
<td>19</td>
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<tr>
<td>Ethylene price (NEA)</td>
<td>34</td>
<td>61</td>
<td>27</td>
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</tbody>
</table>

Source: CMAI
Are Crude Oil Prices likely to Remain Elevated?

Factors influencing continued strong price

- Global economic growth and crude consumption
- Global vehicle sales
- Rising production costs
  - Marginal crude sources
  - Middle east social cost pressures
- Political instability in producing nations

Factors influencing to the downside

- US production resurgence
- Vehicle fuel efficiency
- Regulations diversifying fuel mix

Most experts forecast continued elevated crude oil

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<tr>
<td>$/bbl</td>
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<td>103</td>
<td>102</td>
<td>104</td>
<td>108</td>
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</table>

Source: CMAI
Will Natural Gas Prices Remain Low?

Production has remained strong despite reduced rig count

- Estimate that rig count must fall below 700 to stabilize inventory levels

### Henry Hub Price Forecast

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<td>$/mbtu</td>
<td>4.0</td>
<td>2.8</td>
<td>3.7</td>
<td>4.3</td>
<td>4.6</td>
<td>4.9</td>
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</table>

Source: Global Insight

![Graph showing Henry Hub Price Forecast with years 2011 to 2016, projected prices, and monthly gas rig count and production from January 2007 to January 2012.](image)

Source: EIA, Bentek
Potential for further improvements as experience develops and majors become more significant participants

Source: IHS CERA. May not be used for any purpose without the express written consent of IHS CERA

Note: Mcf = thousand cubic feet.
Low Prices and Abundant Supply are Forecast to Drive Strong Natural Gas Demand Growth

Natural gas end use increase leading to increased ethane production in a well supplied natural gas environment
Natural Gas NYMEX Price Breakevens by Play (15% After Tax Rate of Return)

- Most fields yield an acceptable return at $5-6.00/mmbtu
- Low natural gas prices drive production to NGL rich fields

Source: Investment Banks
The Value of NGLs Drives Production Even at Low Natural Gas Prices

NGL Component Values vs. Natural Gas

Dry vs. Rich Gas: NGL Uplift (Margin Over Fuel Value)

Potential for further improvements as experience develops and majors become more significant participants

Source: CMAI, LYB
Trend Toward Wet Wells Benefits US Ethylene Producers

If we assume 10% shift from dry gas to wet gas, NGL production can increase significantly.

As drilling emphasis shifts, ethane production is not being sacrificed, in fact, it can be increased.

Source: LYB
Both the Mid-Stream and Ethylene Industries are Responding to this Trend

Development has been like a game of leapfrog and the next step is significant fractionation and pipeline infrastructure addition.
Ethane Premiums to Natural Gas have Grown but so has the Advantage Versus Global Naphtha

Ethane Premium to Fuel Value ("Frac Spread")

- US natural gas energy value: 15-20 c/gal
- Global naphtha economics: 115-150 c/gal

Source: CMAI
Shift in Feed Mix Has Significantly Impacted Co-Products

- Co-product capabilities add significant value
- Future growth in durable products could further benefit co-products

Sources: CMAI.

(1) Estimated co-product production based on 2011 ethylene production and 2006 and 2011 feed mixes.
Ethane is Not the Only Important NGL in the US Market

**US Cost of Ethylene Production**

- Propane COE*
- Naphtha COE
- Ethane COE

<table>
<thead>
<tr>
<th>Year</th>
<th>Propane COE</th>
<th>Naphtha COE</th>
<th>Ethane COE</th>
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<td>2009</td>
<td>30</td>
<td></td>
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<tr>
<td>2011</td>
<td>40</td>
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</table>

Source: CMAI

* COE – Cost of Ethylene

**US NGL Supply Growth**

- C4+
- Propane
- Ethane

<table>
<thead>
<tr>
<th>Year</th>
<th>C4+</th>
<th>Propane</th>
<th>Ethane</th>
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<tr>
<td>2016</td>
<td>450</td>
<td>550</td>
<td>1850</td>
</tr>
</tbody>
</table>

Source: Bentek

**Propane:**
- Can limit ethane pricing
- Greatly expands the cracking pool
Strong LYB Results in Global Trough

**Global Ethylene Effective Operating Rates**

Performance has been driven by actions, geographic position and assets, not cycle

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**Global Refining Operating Rates**

Sources: CMAI, Purvin & Gertz.
At These Low Operating Rates Global Margins Have Been Near Trough Levels

Asian margins have been weak, Asian prices set the global price

Source: CMAI
Balance begins to shift in favor of producers in 2012 / 2013

Source: LYB,CMAI
Economic forecasts anticipate a significant increase in the Asian middle class - this typically drives ethylene demand.
The Path from Concept to Full Production is Long

A major ethylene project can require 5+ years to move from concept to production
The Stars Are Aligning For A Bright Tomorrow

• View from a US ethylene producer perspective
  – Geography, geology, technology are positively aligned
  – Economics of crude oil and natural gas support U.S. producers
  – Infrastructure investments are bringing NGL’s to the market
  – Supply / demand positioned for a cyclical upside
  – New U.S. plants are not forecast to start-up until 2016+

We continue to believe:
  – Good today and better tomorrow
  – The stars are aligning