Updates on
POSCO SNG Project
POSCO Gwangyang SNG Project

- 0.7 B NM3/yr SNG production (500,000 mtpy)
- 5500 mtpd sub-bituminous coal processed into syngas and catalytically converted to methane
- 2 + 1 Gasification Trains
- Located adjacent to the POSCO Gwangyang Steel Mill on reclaimed land
- Groundbreaking 2Q2011, Start-Up in 4Q2014
- First Gasifier set April 2013
SNG Process Overview

Courtesy of POSCO
- Feedstock Capacity & Specification: 5,500 mtpd (1.8 MM mTPY) Sub-Bituminous Coal

<table>
<thead>
<tr>
<th>Selected Coals</th>
<th>Feedstock Range</th>
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<tbody>
<tr>
<td><strong>Gross As Received (GAR)</strong></td>
<td></td>
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<tr>
<td><strong>Total Moisture (as received)</strong></td>
<td>%</td>
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<tr>
<td>Intrinsic Moisture</td>
<td>%</td>
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<tr>
<td>Volatile Matter</td>
<td>%</td>
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<tr>
<td><strong>Ash</strong></td>
<td>%</td>
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<tr>
<td>Fixed Carbon</td>
<td>%</td>
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<td>S</td>
<td>%</td>
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<td>Cl</td>
<td>%</td>
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<tr>
<td><strong>Ultimate Analysis Dried Ash Free (daf)</strong></td>
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<tr>
<td>HGI</td>
<td>%</td>
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<tr>
<td>S.E. gar (HHV)</td>
<td>kcal/kg</td>
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<td>kcal/kg</td>
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</tbody>
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POS CO SNG Project

- **General Information**
  - Client: POSCO
  - Contractor: POSCO E&C (EPC Turnkey including PDP, FEED, & Commissioning)
  - Plant Capacity: SNG 500,000 ton/year
  - Coal Consumption: 2 Million ton/year
  - Construction Area: 400,000 m²
  - Project Period: 2009.11 ~ 2014.8 (58 months)
  - Project Cost: 1 Billion USD
  - Licensor: CB&I (Gasification) / Linde (AGR) / Haldor Topsoe (Methanation)

- **Project Schedule**

  ![Project Schedule Diagram]
Groundbreaking in June 2011
Piling Start in Feb 2012
Syngas Cooler
Coal Storage Silos
500,000 mtpy SNG
2+1 trains
sub-bituminous coal

Site Photo
Sept. 30, 2013
POSCO SNG Project
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Thank You