

#### Create Shareholder Value

Lu'An Clean Energy Project Expansion

September 11, 2017





## Forward-looking statements



NOTE: This presentation contains "forward-looking statements" within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements about expected outcomes of the Company's investments in the Changzhi City project and joint venture. These forward-looking statements are based on management's reasonable expectations and assumptions as of the date this presentation is furnished. Actual performance and financial results may differ materially from expectations reflected in the forward-looking statements because of many factors not anticipated by management, including, without limitation, the Company and the JV's ability to obtain required operating and safety permits and other regulatory approvals, regional economic conditions and product supply and demand dynamics; political risks, including the risks of unanticipated government actions; acts of war or terrorism; future financial and operating performance of the JV's customer; unanticipated contract termination or customer cancellation or postponement of the Changzhi City project; the Company's ability to complete the project and operate the facility; asset impairments due to economic conditions or specific events; the impact of price fluctuations in coal to liquid products; disruptions in the Company's business, markets or the economy due to unknown or unanticipated impacts of hurricanes; the impact of changes in environmental, tax or other legislation, accounting treatments, economic sanctions and regulatory activities; and other risk factors described in the Company's Form 10-K for its fiscal year ended September 30, 2016. The Company disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained in this presentation to reflect any change in the Company's assumptions, beliefs or expectations or any change in events, conditions, or circumstances upon which any such forward-looking statements are based.





# Air Products and Lu'An Clean Energy Company to form \$1.3B JV

- JV: Air Products Lu'An (Changzhi) Co., Ltd.
  - Ownership = 60% APD / 40% Lu'An
  - APD will fully consolidate JV financials
  - JV will receive coal, steam and power from Lu'An
  - JV will supply syngas to Lu'An under long-term onsite contract
  - Expected to close post-initial operational startup & regulatory/government approval
- Assets Shanxi, China

<b>Air Products</b>	S	Lu'An
under cons million)	s 4 ASUs currently struction (~\$300 s ~\$500 million	<ul> <li>Contributes gasification and syngas clean-up currently under construction (~\$1 billion)</li> </ul>
		<ul> <li>Receives ~\$500 million</li> </ul>



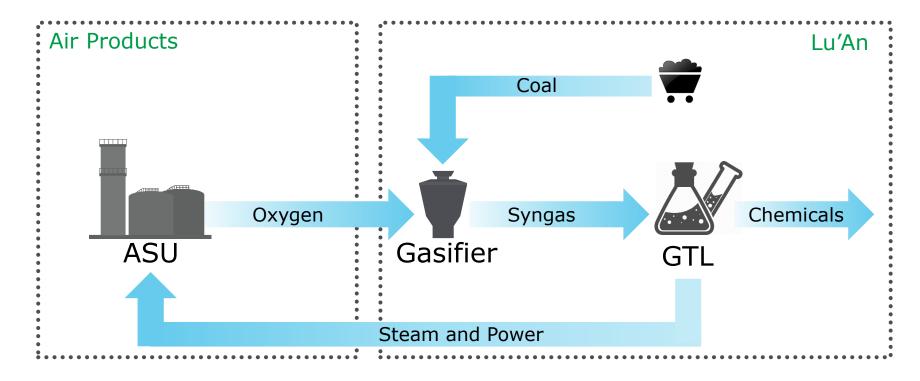
## Perfect fit with our strategy

- Five-Point Plan
  - Focus on the core: Industrial Gases
- \$8 billion capital available over next three years:
  - M&A
  - Asset buyback
  - Expanded scope
- Onsite business model: secure and stable cash flow
  - Base facility payment structure





## Lu'An Changzhi City, Shanxi, China Major processes – **Before JV**

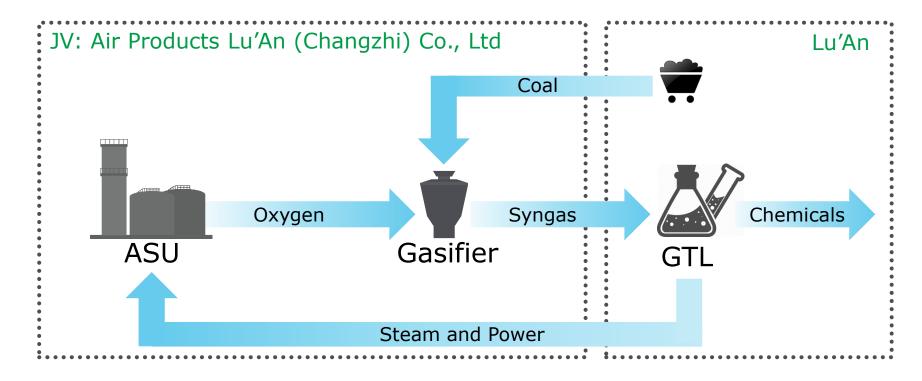


#### Energy, Environment & Emerging Market growth





## Lu'An Changzhi City, Shanxi, China Major processes – **After JV**



#### Energy, Environment & Emerging Market growth





#### Coal-to-Liquids project

- Air Products Lu'An JV (Coal-to-Syngas)
  - Air Products four ASUs to supply 10,000+ tpd oxygen and 6,000+ tpd nitrogen
  - Proven technology for syngas production
    - Four Shell gasifiers
    - Lurgi Rectisol syngas cleanup
- Lu'An Clean Energy Company (Syngas-to-Liquids)
  - Produce ~1.8million TPY of oils & chemicals
  - Commercially-proven SynFuels Fischer Tropsch advanced gas to liquids technology
  - Owned by Lu'an Mining Group company
    - Founded 1959
    - 2015 sales: \$26B
    - Assets: \$28B





#### Air Products onsite business model



- Lu'An focus on downstream oils and chemicals
- Lu'An responsible for:
  - Capital cost and startup of gasification and syngas cleanup
  - Coal, steam and power supply to JV
- Air Products responsible for:
  - Capital cost and startup of ASUs
  - ASU and syngas operations management expertise
- JV
  - Project construction essentially complete prior to JV
  - Own/operate ASUs, gasification and syngas clean-up system
  - Syngas supply agreement from JV to Lu'An
    - 20-year term
    - Coal, steam & power provided under processing services agreement
- APD Financials (fully consolidate on APD P&L)
  - Invest ~\$800 million = ~\$300 million ASUs + ~\$500 million
  - Returns consistent with our commitments





## Lu'An Clean Energy Project Expansion: profitable growth aligned with our strategy

Industrial Gases
Onsite business model

Expanded scope
Shareholder value creation







Thank you tell me more

