Who We Are

• Founded in 1902
• Represent over 95% of U.S. refining capacity and petrochemical manufacturing
• More than 400 member companies
  – Refineries
  – Petchem manufacturers
  – Service providers
What We Do

• AFPM represents members in the “downstream” section of the supply chain
What are Petrochemicals?

• Set of very specific chemical compounds

• Generally speaking a petrochemical is a chemical derived from oil or natural gas
  – Vast majority of petrochemicals are derived from oil or natural gas
  – U.S. mostly uses nat gas
Petrochemicals 101

• Base petrochemicals
  – Ethylene
  – Propylene
  – Butadiene
  – Benzene
  – Toluene
  – Xylene

• Let’s focus on ethylene
How to Make a Petrochemical – Ethylene Example

Graphic courtesy of Shell Chemical
Where are Petrochemicals Used?

- Housing and construction
- Medical applications
- Vehicles
- Electronics
- Packaging
- Military
- Clothing
- Much, much more
Impact of Shale Revolution

• U.S. chemical industry is the largest industrial consumer of nat gas

• New economics = U.S. competitive advantage
  – 2008 – nat gas was selling for ~$12.50/MM Btus
  – Today – less than $3/MM Btus

• Dramatic reversal – U.S. now one of the most affordable for chemical production
Impact on U.S. Chemical Industry

• 243 projects announced
• $147B in new capital investment
• 383,000 direct and indirect jobs by 2023
• More than half of the investment is by firms based outside the U.S.

Source: American Chemistry Council
Shale Gas-Driven Investment in Petrochemicals

Source: ICIS News
American Shale & Manufacturing Partnership (ASMP)

• Focused on shale development and its impact on the manufacturing supply chain
• 14 members – academia, union, associations, NGOs
• Series events in PA, OH, TX, LA and CO
• Over 425 participants
Final Report

• “Ideas to Empower America’s Emerging Shale-Based Manufacturing Renaissance”

• Focused on 5 core areas:
  – Workforce development
  – Environment
  – Infrastructure
  – Research and innovation
  – Federal and state policies
The Key to Success
This rock is changing the world.

Shale Oil & Gas
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