September 2013

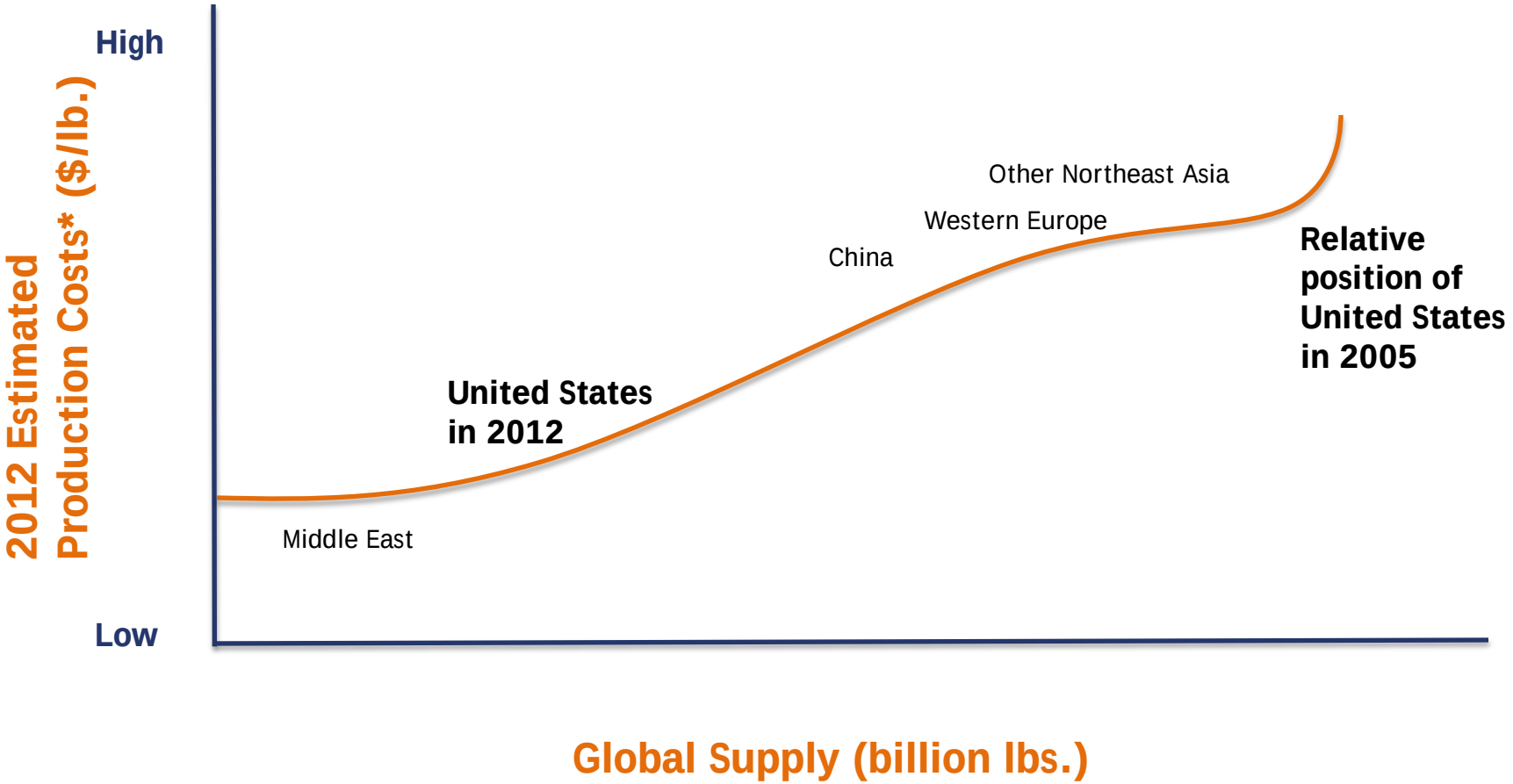
CHEMISTRY & SHALE GAS: FUELING A U.S. MANUFACTURING RENAISSANCE

American® Chemistry Council

Global Ethylene Supply Curve:

Shift in Relative Position of United States (2005-2012)

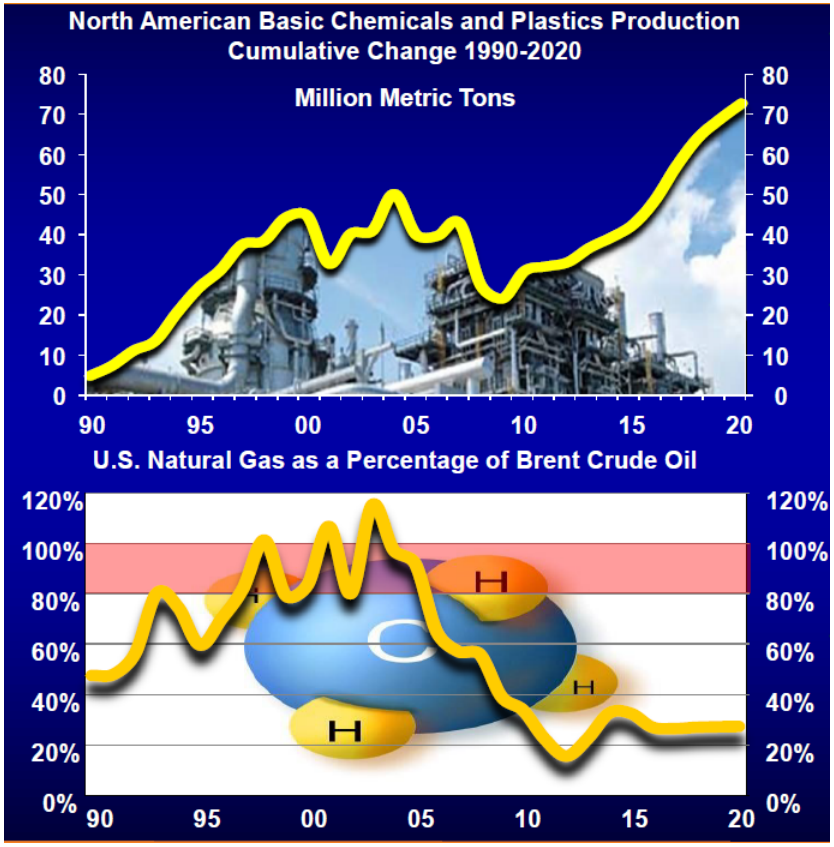
(Petrochemical Production Costs by Country/Region)



*Based on estimates from best available data

Shale Boom Driving New US Investment

North American Competitive Advantage Sustained through 2020



- ✓ **Affordable, competitively priced natural gas is driving significant new capital investment in the US manufacturing sector**
- ✓ **Long-term, sustained opportunity in feedstock supply and cost**
- ✓ **Some of the new capacity is result of new foreign-direct investment in US**

IHS

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U.S. Shale Gas

Manufacturing renaissance due to increased access to natural gas from shale

Downstream partners are more competitive than ever

Chemical Investment

More than 100 projects announced to date

$72 billion in potential chemical industry capital investments arising from shale gas

ETHYLENE CHAIN

NATURAL GAS

FROM CHEMISTRY TO ENERGY

American Chemistry Council

$72B in new investment

$55B chemical industry investments

=

662K direct & indirect jobs

- Plastics/ Rubber Products
- Fabricated Metals
- Chemicals
- Glass
- Foundries
- Paper
- Aluminum
- Iron/Steel

Policies Needed to Realize Potential

Tax Treatment

Minimize cost and reduce complexity for businesses

Consider accelerated depreciation in tax policy

Permitting

Timely approval of new construction permits for projects and investments

Infrastructure

Ensure reliable infrastructure to transport natural gas supplies

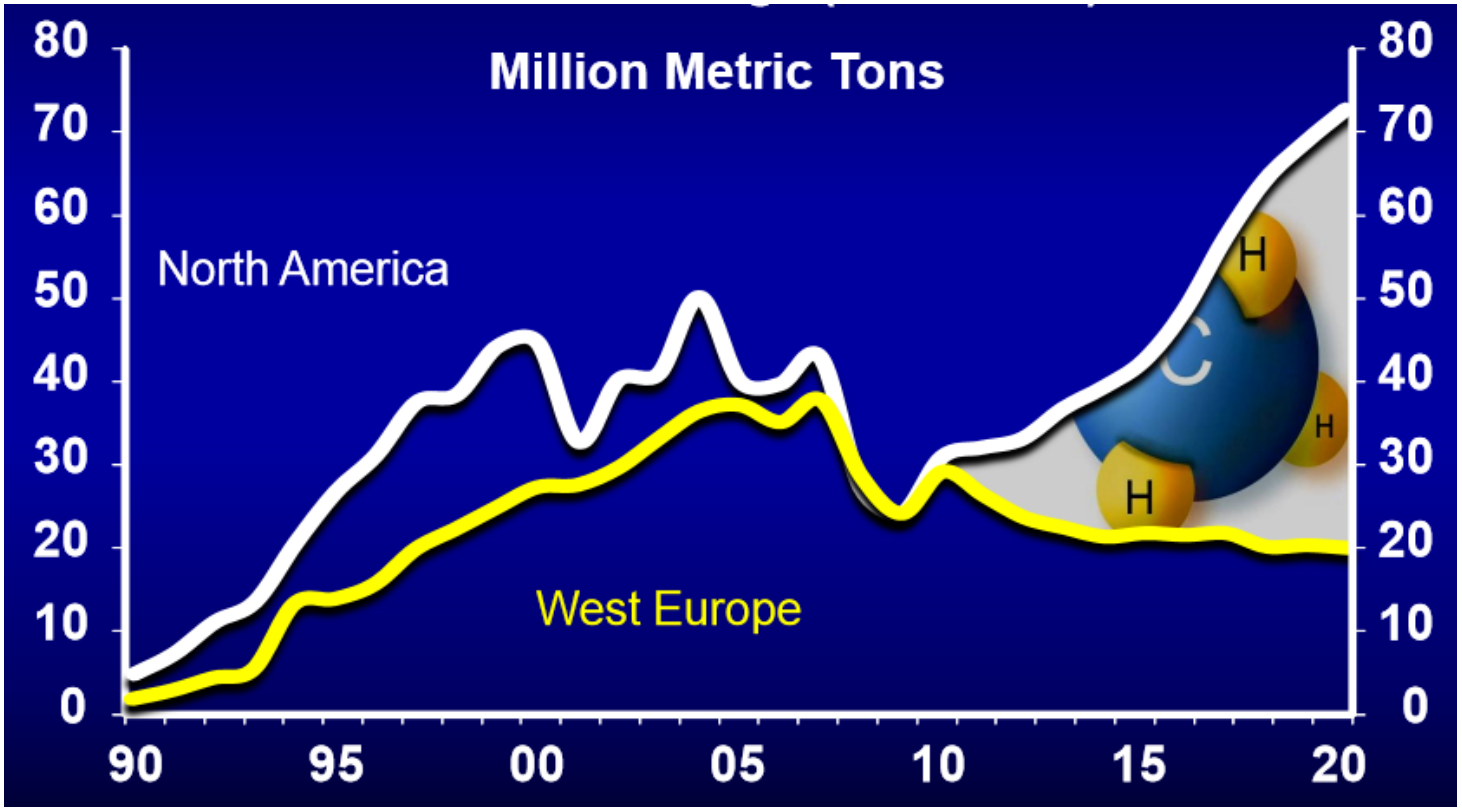
State Regulations

Implementation of responsible state-based regulations that avoid undue restrictions on natural gas supplies

Global Chemical Production:

Growing Competitive Advantage for the United States

(N. America and Western Europe Production of Basic Chemicals /Plastics; 1990 base)



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Fueling Export Growth

American Chemistry

- **$189 billion** in annual exports
- **12%** of all U.S. exports
- **200,000** chemistry jobs are export dependent

58 billion in additional jobs and export growth potential

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