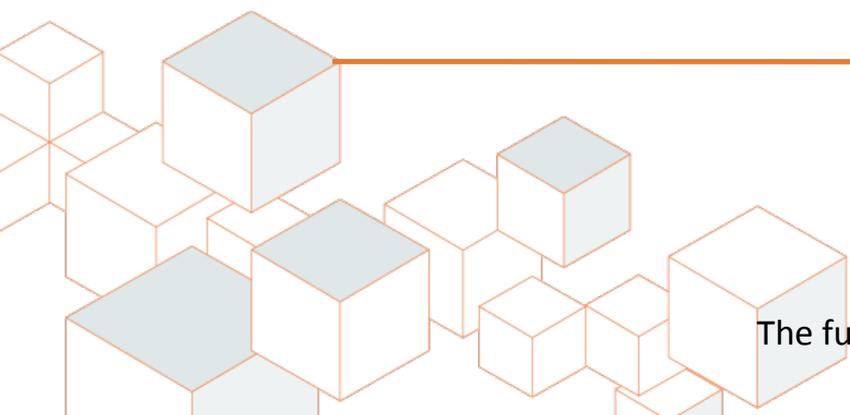


May 2013

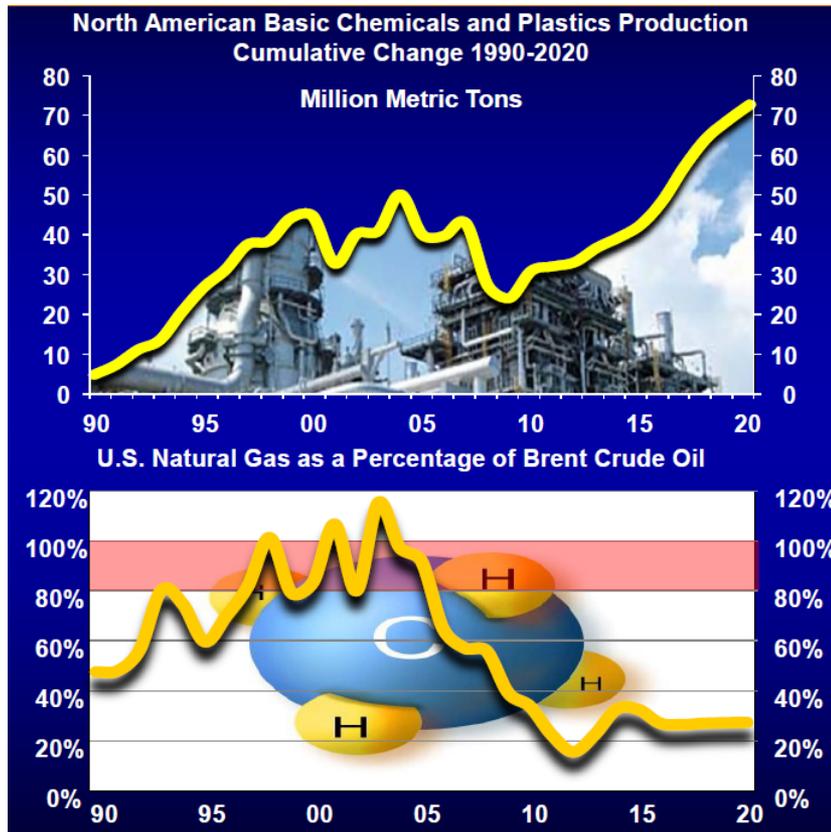
SHALE GAS, COMPETITIVENESS, AND NEW U.S. CHEMICAL INVESTMENT: **AN ANALYSIS** **BASED ON ANNOUNCED** **PROJECTS**



The full ACC report is available <http://chemistrytoenergy.com/shale-study>.

Shale Boom Driving New U.S. 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
- ✓ 51% of new, publicly-announced chemical industry investment is from firms based outside the US



Data provided with permission from IHS Global Insight

U.S. Shale Gas



Manufacturing renaissance due to increased access to natural gas from shale

Downstream partners are more competitive than ever

Chemical Investment



Nearly 100 projects announced as of March 2013

\$72 billion in potential chemical industry capital investments

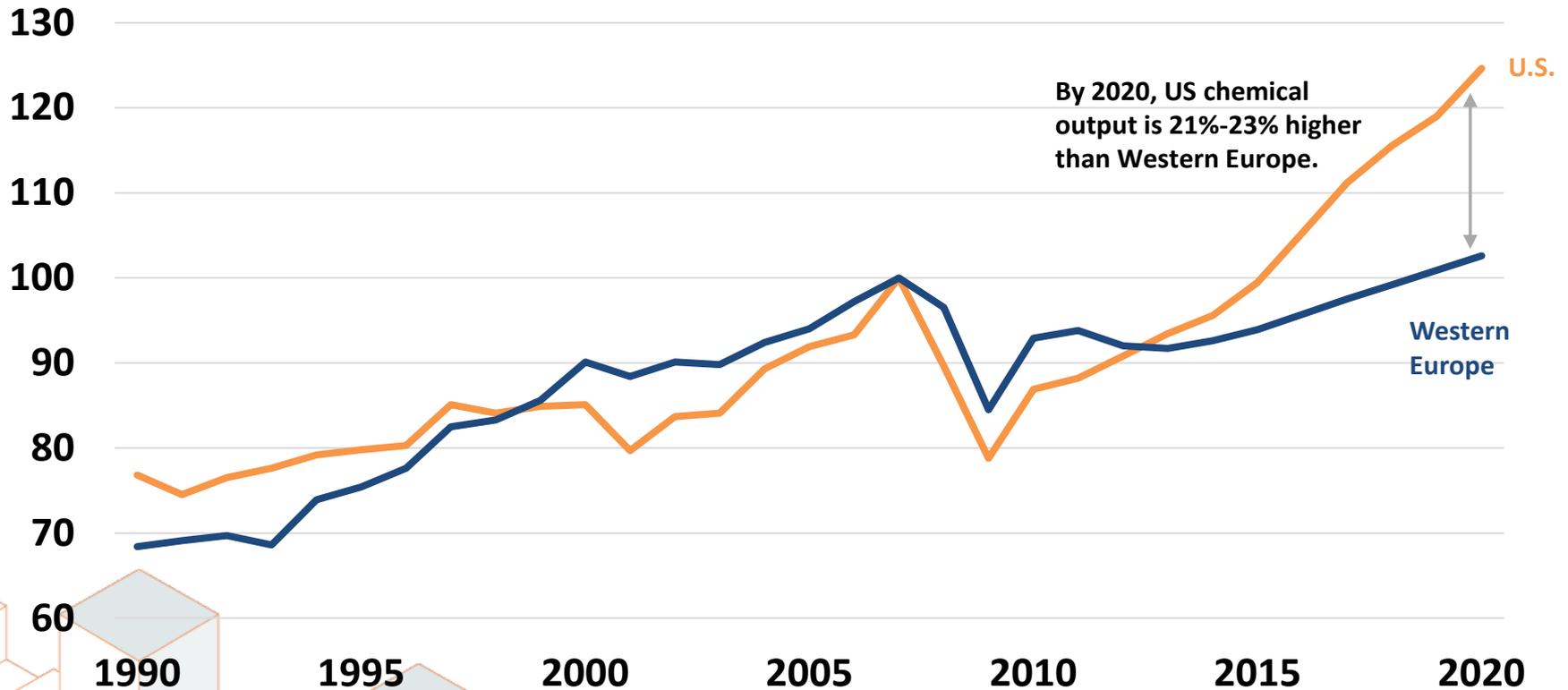
\$67 billion in additional output by 2020

ETHYLENE CHAIN



US Chemical Industry Growth Outpaces Western Europe

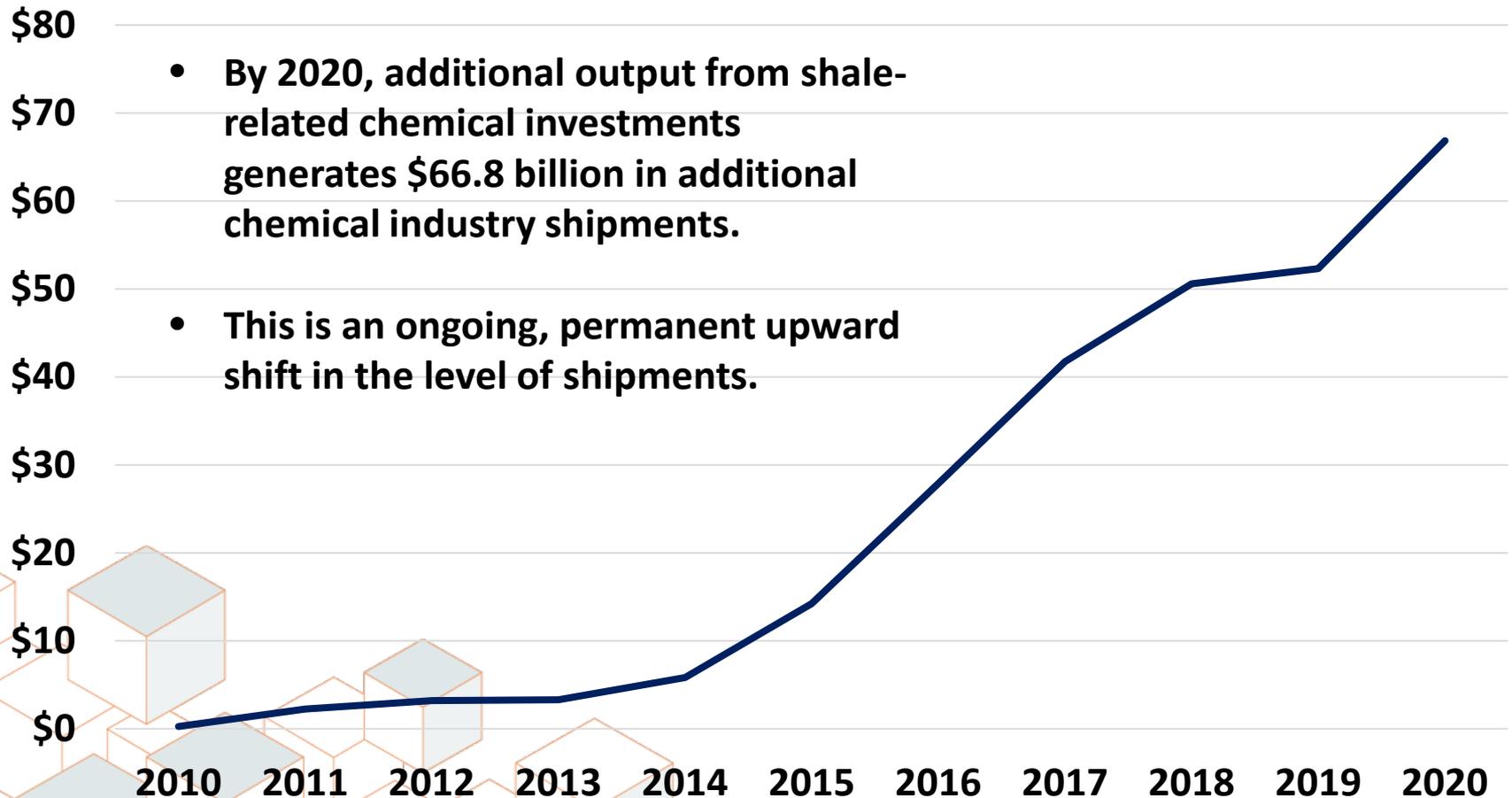
Chemicals excl. Pharmaceuticals - Volume Index of Production (2007=100)



Sources: Eurostat, FRB, ACC analysis

New ACC Study: US Chemical Industry Output from Shale-Related Investments

Billions of 2012 Dollars

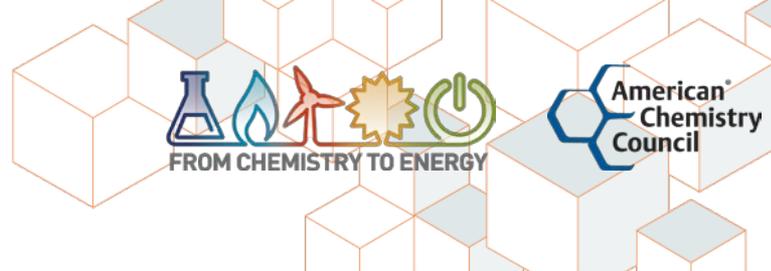


New ACC Study: Economic Contributions from Announced Chemical Industry Investments in U.S.

	During Investment Phase 2010-2020* (Temporary)				From Higher Chemical Industry Output in 2020 (Permanent)		
	Total Jobs	Average Jobs Added Per Year	Payroll (\$ Billion)	Output (\$ Billion)	Total Jobs	Payroll (\$ Billion)	Output (\$ Billion)
Direct	485,054	44,096	\$30.7	\$71.7	46,359	\$4.9	\$66.8
Indirect	258,039	23,458	\$16.4	\$55.9	264,111	\$18.9	\$100.4
Induced	442,233	40,233	\$20.8	\$66.2	226,272	\$10.6	\$33.9
Total	1,185,326	107,757	\$67.9	\$193.9	536,741	\$34.4	\$201.1

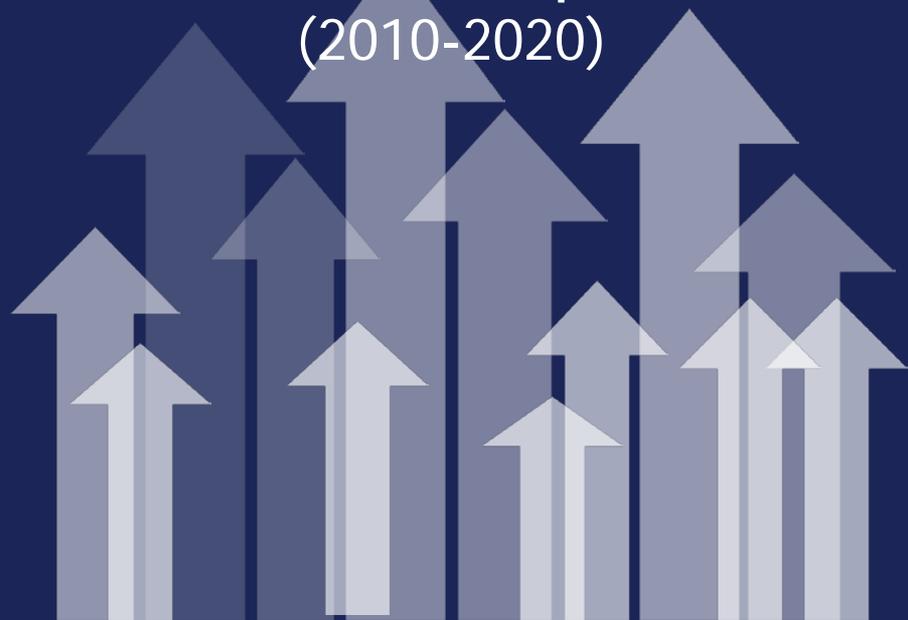
**Because the investment occurs over a multi-year period, investment phase jobs should be interpreted as work-year jobs. This is done to avoid double-counting the same job in multiple years.*

New ACC Study: Tax Revenue Benefits



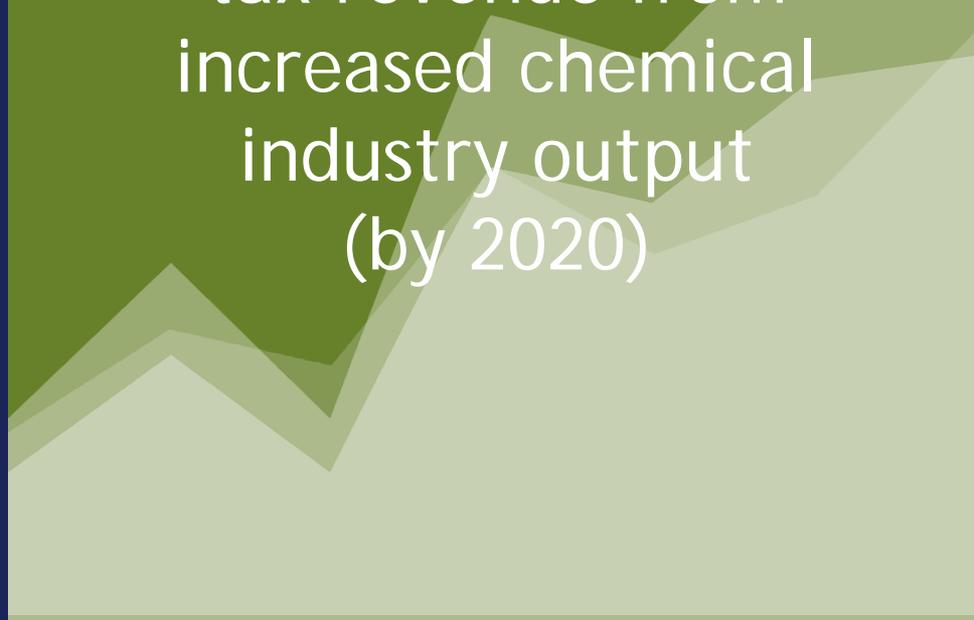
\$20B

in NEW federal, state, and local tax revenue during investment phase (2010-2020)



\$14B

in NEW, PERMANENT federal, state, and local tax revenue from increased chemical industry output (by 2020)





Policies Needed to Realize Potential

Access: Allow access to natural gas reserves on government and private lands.

Infrastructure: Ensure reliable infrastructure to transport supplies

State Regulations: Implement responsible state-based regulations that avoid undue restrictions on natural gas supplies

Tax Treatment: Minimize cost and reduce complexity for businesses. Maintain accelerated depreciation in tax policy