

America's New Energy Future: The Unconventional Oil & Gas Revolution and the U.S. Economy

The United States is realizing one the largest energy transformations it has ever experienced—stemming from the massive increases in production of shale energy. While many Americans are just beginning to learn about this shale revolution, the beneficial impacts have been growing, and look to expand exponentially in the coming years.

In order to better understand the scope and potential of this shale revolution, the Institute for 21st Century Energy at the U.S. Chamber of Commerce has partnered with other associations and IHS, a leading independent global energy consulting firm, to quantify the existing and expected economic and energy security impacts. The resulting series of reports, *America's New Energy Future: The Unconventional Oil & Gas Revolution and the U.S. Economy*, is the first-ever attempt to examine the shale revolution across the entire country and provide concrete national metrics to help Americans begin to understand how large this revolution is...and will be.

Released in September, 2013, the **third and final volume** of the study not only quantifies the additional economic impact generated from the midstream and downstream sectors—like manufacturing, petrochemical, or pipeline industries—but also looks at cumulative impacts across the entire shale energy value chain, as well as the implications of a more restrictive regulatory environment. It is becoming increasingly better understood across the country how the exploration and extraction of shale energy has been, and will continue to be, one of the largest economic drivers in our economy. However, the extraction component is only the beginning. Tens of thousands of miles of new pipelines and dozens of new rail lines are being constructed to transport the shale oil and natural gas and dozens of new facilities are being planned to process and turn those commodities into products we use every day like gasoline, plastics, fertilizers, and chemicals. Once those facilities are constructed, the rest of the manufacturing sector will be able to take advantage of that new supply of abundant and competitively priced feedstocks to expand even further making America's manufacturing sector significantly more competitive in the global market, yielding a true manufacturing renaissance.

ECONOMIC DEVELOPMENT FROM SHALE DEVELOPMENT VALUE CHAIN

	2012	2020	2025	2012-25
JOBS (in millions)	2.1	3.3	3.9	
GDP (in billions)	\$284	\$468	\$533	
GOV REVENUESS (in billions)	\$74	\$126	\$138	\$1,615
Increased Household Disposable Income	\$1,200	\$2,700	\$3,500	

In 2012, the full unconventional value chain— from upstream energy through energy-related chemicals—related to shale oil and natural gas development, supported 2.1 million jobs, created nearly \$75 billion in government revenues, and added \$284 billion to US GDP. By 2025, these economic contributions will grow to 3.9 million jobs and more than \$533 billion in annual contributions to GDP. More than \$1.6 trillion in state and federal government revenues are expected to be generated between



2012 and 2025. The cumulative impact of shale production is directly benefiting all Americans, adding \$1,200 in disposable income to the average household in 2012 and is projected to add more than \$3,500 in 2025.

While these tremendous economic benefits are expected to accumulate given the current operating environment, they are not guaranteed. Policies at the federal and state levels could render these projections moot and prevent the country from realizing the benefits. The study looks at the consequences of adopting measures that would prevent shale energy development or make it cost-prohibitive. If such policies were adopted, in 2015 more than 1.4 million fewer jobs would be supported, \$128 million less economic growth would be created, and \$30 billion less in government revenue would be generated.

The **first volume** in the series focuses on the macro-economic benefits created solely from the extraction of shale oil and natural gas. The study found that in 2012 shale energy production supported 1.75 million jobs, contributed \$238 billion to GDP, and generated \$62 billion in government revenues with future projections exponentially higher.

Volume two provides a state-by-state breakdown of economic benefits provided by shale energy development. Many Americans, especially those living in states with shale production, understand the profound economic contribution shale development brings to the economy, and in many non-petroleum sectors ranging from steel production to automotive to lodging. Volume two also demonstrates the broad supply chain that supports shale development, finding that a state like Florida with no shale resources had over 36,500 jobs supported by shale production in other states which also generated over \$6.4 million in state and local government revenue.

Overall, the IHS study provides the U.S. with assurance that it is on the right path—towards economic growth, job creation, and increased economic security—but we must guard against stopping these trends in their tracks…before we can realize the benefits.