

The Shale Oil Revolution Actually Reflects A Nation In Decline

Faster consumption + no strategy = diminished prospects

eResearch Corporation is pleased to provide an article written by Chris Martenson, co-founder of **PeakPROSPERITY**, entitled “The Shale Oil Revolution Actually Reflects a Nation in Decline”

Mr. Martenson’s article begins on the next page. You can also access it directly at **PeakPROSPERITY** at the link below. Use <CTRL-CLICK>.

[Shale Oil Revolution](#)

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Faster consumption + no strategy = diminished prospects

JANUARY 11, 2019

By *Chris Martenson*

Here in the opening month of 2019, as the U.S. consumes itself with hot debate over a border wall, far more important topics are being ignored completely. Take U.S. energy policy. In the U.S. press and political circles, there is nothing but crickets sounding when it comes to serious analysis or any sort of sustainable long-term plan. Once you understand the role of energy in everything, you can begin to appreciate why there is simply nothing more important to get right. Energy is at the root of everything. If you have sufficient energy, anything is possible. But without it, everything grinds to a halt.

For several decades now, the USA has been getting its energy policy very badly wrong. It is so short-sighted, and it relies so heavily on techno-optimism that it barely deserves to be called a 'policy' at all. Which is why we predict that, in the not-too-distant future, this failure to plan will attack like a hungry wolf-pack to bite down hard on the U.S. economy's hamstrings and drag it to the ground.

Shale Oil Snafu

America's energy policy blunders are nowhere more obvious than in the shale oil space, where it is finally dawning on folks that these wells are going to produce a lot less than advertised. Vindicating our own reports -- which drew from the excellent work of [Art Berman](#), [David Hughes](#) and [Enno Peters' excellent website](#) -- the WSJ finally ran the numbers and discovered that shale wells are not producing nearly as much oil as the operators had claimed they were going to produce:

Fracking's Secret Problem—Oil Wells Aren't Producing as Much as Forecast

January 2, 2019

Thousands of shale wells drilled in the last five years are pumping less oil and gas than their owners forecast to investors, raising questions about the strength and profitability of the fracking boom that turned the U.S. into an oil superpower.

[\(Source\)](#)

The main conclusion of this analysis is that U.S. shale producers have overstated their well output by 10% collectively, and as much as 50% for certain individual companies. These numbers are easy to collect and analyze. While it is a great thing to finally have the WSJ show up here, many years later than the independent analysts cited above, they still did not get close to the actual truth.

In actuality, the shale plays are going to produce roughly half of what is currently claimed by shale operators.

Instead of a -10% collective hit to production, we should be ready for something closer to -50%. Not only does that “raise questions” about the role of the U.S. as an oil superpower, it ought to raise alarm bells about its entire energy strategy.

A Quick Lesson On Strategy

To take a minor detour, I spent several years of my life as a corporate strategy consultant. These efforts involve teams of people, complex processes, and loads of work. But if you strip away all of the complex nonsense, a strategy is quite simple. A strategy is nothing more than thoroughly addressing both parts of this question: *Where are you going, and how are you going to get there?* Or put another way: *What’s your vision and what are your resources?*

This is true whether you are a nation, a major international corporation, or an individual. If you know where you are going and how you will get there – congratulations! – you have a strategy.

Because it is easy to dream up more “vision”, the vital part of having a strategy is being sure that your vision is both grand but achievable given your resources.

The USA has been blessed with abundant oil and natural gas resources. What it lacks is any sort of a vision about where we would like to be when those wind down and eventually run out. Will the USA resemble a 3,000 mile wide version of Detroit, full of decay and misery? Or can it engineer an intelligently-planned and executed transition to a complex network of clean and sustainable energy sources, full of hope?

It is really not an over-statement to say that the USA is currently operating without an energy strategy. The vision, such as it is, seems to rest on the idea that sufficient oil will always be found and produced to meet its needs. End of story.

No, It Won’t

While I have a lot of admiration for the technology, the expertise, and the diligence of the people working in the oil sector, I have even more respect for geology.

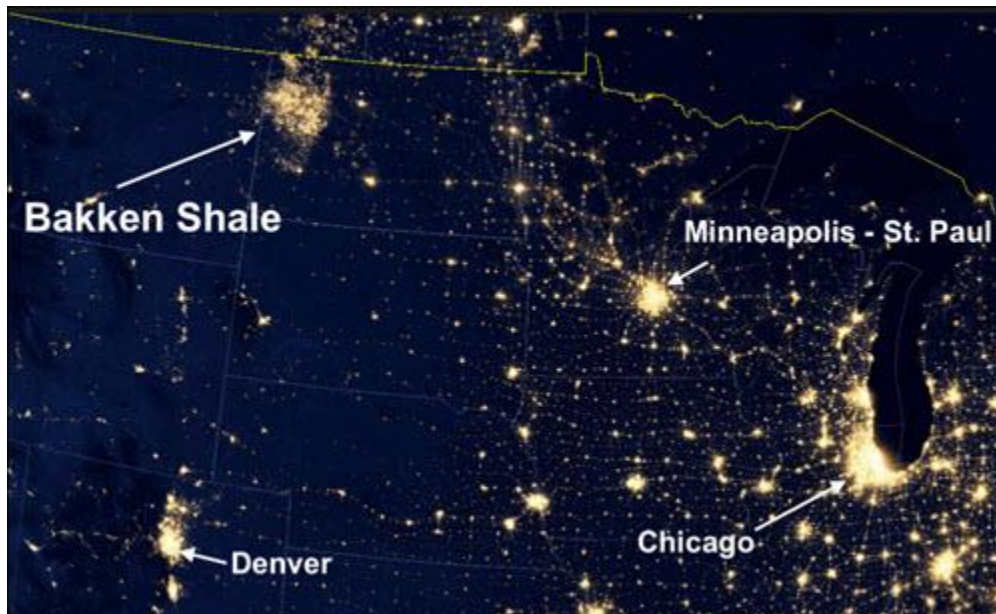
The USA began its love affair with oil by going after the conventional reservoirs that sat atop ancient marine shale basins where 400 million years' worth of ancient sunlight was stored in the form of deposited plankton and algae. Those conventional reservoirs eventually were all found and tapped. Everyone in the oil space agrees that the biggest of them have all been discovered and there are very few conventional finds left.

What the shale “revolution” (or “retirement party” as Art Berman more accurately calls it), did was to drill straight into the source rocks themselves. Which require much more energy and cost to coax the oil from. What is left after the source rocks? Nothing, that’s what. There are no “pre-source” rocks to drill into next.

We are scraping away at the literal bottom of the geologic barrel, pretending as if that were all perfectly normal and sustainable. It is neither.

Yes, the shale oil and natural gas extracted by fracking is going to be used. That much is a given. But on what? To continue to allow [SUVs and light trucks to continue to be the most popular vehicles](#) sold to U.S. consumers?

Or to continue to flare off (i.e. burn) excess natural gas from these wells that you can clearly see the wastage from space?



Additionally, fracking has led to shortages of fresh water and [sand](#), as well as [pipeline bottlenecks](#). All of which speak to the blind haste and urgency of the shale business. As poor as the economics are for the shale drillers, which have collectively spent some \$260 billion more than they have taken in from their operations, things are even worse than commonly understood, because the public is on the hook for billions of dollars worth of road and bridge damage caused by fracking trucks.

In Texas, the road damage [might be as much as twice the amount](#) brought in by taxing the oil operation revenues. So billions of public subsidies go typically uncounted in the overall costs of fracking for shale oil and gas.

Meanwhile, the U.S. press continues to cheer-lead the efforts to rip the oil and gas out of the ground as fast as possible, as if there were some national emergency where there just is not time to do things right.

What is the emergency, we wonder? What is so urgently important that we feel the need to cut corners and simply burn our natural gas, a non-renewable fossil resource, as a waste product into the night sky? The emergency, we suspect, is that those involved in financing the shale companies do not want people pausing long enough to ask the right questions, which the WSJ finally did.

Conclusion

Look, I consume oil and gas. I drive a car and I heat my house in the winter. So I am not even remotely saying that the shale plays should be summarily abandoned.

What I *am* saying is that we are blindly proceeding without any sort of national strategy in place, using up extremely valuable and non-renewable energy resources at a blistering pace.

Should our oil be taken out of the ground so quickly that exporting it to other nations is the only opportunity to 'get rid of it?'

Maybe. Or, maybe not.

First we would have to know how much there is (i.e., the resources) and where we hope to be when it runs out (the vision). If there is enough to fund both our future visions and export some, too, then okay, go ahead and export it. The problem, as you know, is that the USA has no clear vision for where it would like to be in 20 or 30 years.

If the future is going to be mostly electrified, then there are huge energy expenditures to be made in alternative electricity production and storage, build-out of electric vehicles and mass transit systems, and a complete overhaul of the agricultural system.

I would propose that the energy cost (not the dollar cost) of all that activity is largely unknown. This means that the USA is running the risk of wasting this last bonanza from the shale revolution on frivolous pursuits.

If the WSJ analysis is right (and they did not consult with any of the experts I trust on the matter) then there is around 10% less oil in the shale plays than we thought. Not great, but survivable.

If the analyses I trust are more accurate, then there is closer to only 50% of what we thought was there. This is a big problem for a nation without any sort of a plan, especially one that has used the shale output to convince itself that oil abundance is always going to be a part of the landscape.

Beyond the significance of not having an energy strategy, there is the more immediate predicament of how a nation up to its armpits in debt, and sinking rapidly, is going to fare when the great output boom stops and then heads into reverse. High levels of debt and rising energy costs are a terrible combination.

We are placing that collision within the next three years. Are you prepared for that? As things stand, the USA will blunder into that new era completely unprepared, as one might expect for a nation in decline.

In [Part 2: A Bust For The Ages](#), we dive much further into the path and scope of the coming shale yield shortfall, and detail just how devastating it will be for both government, industry, and individuals alike, given the massive dependency on current assumptions.

If future output disappoints, even by a little, the cascade of ripple effects across the economy as that becomes understood will be extremely painful. But the math clearly shows volumes will disappoint by a lot -- so get ready for a bust for the ages.

[Click here to read Part 2](#) of this report (*free executive summary, [enrollment](#) required for full access*).

BW: *The Executive Summary and the beginning of the second article, entitled "A Bust For The Ages", is provided on the next page. You have to enroll in **PeakPROSPERITY** to read it in its entirety.*

A Bust For The Ages

Much Less Oil Than Expected = Much Less Of Everything

Executive Summary

- In short, we have been lied to about the production potential of America's shale wells
- Huge decisions have been made based on the (faulty) assumptions we have swallowed
- When it is finally clear that much less is going to be available (and at a higher price), all hell will break loose
- The choices we make *right now* will determine how bad the reckoning will be

The reason I keep bringing us all back around to the energy situation is because it is so critical to, well... *Everything*.

To make good decisions, you have to be armed with good information. That is not easy to find these days, especially in the USA where we are saddled with a massive propaganda campaign when it comes to energy. Its aim seems to be to convince everyone that there is nothing to worry about. It is a near-constant barrage of these sorts of talking points and ideas:

- The USA is the new Saudi Arabia
- The USA is hitting new production records each month
- The USA is now a net exporter of oil for the first time in 75 years
- Technology has improved so much that shale wells can now break even at \$40/bbl oil prices.

And so on.

The problem with this sort of messaging is that the statements all need a couple of giant asterisks next to them, with some heavy explaining attached, to add critical missing context. They are misleading, at best, and collectively inaccurate. If you buy into these stories, you will probably make the wrong choices. When, not if, but *when* the USA enters the next phase of the oil story, it will all be over. There are not any new source rocks to go after.

I think we are just a few years away from that decline phase, which means we do not have a lot of time to prepare for what is certain to be an ugly period of adjustment.

As I wrote in [Part I](#), the WSJ has finally managed to run some basic numbers and discover that the shale story has been over-hyped by the operators. It is quite a fascinating tale, one that we are quite familiar with at PeakPROSPERITY.

These companies committed quite a few frauds along the way, each of which contributed to over-estimating how much oil (referred to in the industry as the "EUR") that would come out of an average well, which include:

- Claiming much lower than observed rates of decline (5% vs ~15%)
- Using a tiny cluster of highly prolific wells to represent the entire play
- Excluding really crappy wells entirely from the calculations for the "average"
- Using ridiculously long estimates of well life (50 years when there are already wells tapped out after 10 years, in some cases)

These are way beyond simple analytical differences and amount to overt fraud. Okay, fine, *caveat emptor* to the investors, right? Well, the problem here is that the USA generally, and major corporations as well as individuals specifically, have bought the story hook, line, and sinker, and made big, long-term decisions based on these frauds.

[Ford dropped selling sedans in North America](#) to focus on selling trucks and SUVs, the U.S. government [rolled back plans on fuel standards](#), and [individuals bought pickup trucks and/or SUVs](#) under the theory that gasoline would always be cheap.

At a minimum, you should not be invested in....



Or [Sign In](#) with your enrolled account.

ABOUT THE AUTHOR



Chris Martenson is an independent economist and author of a popular website, PeakProsperity.com.

Dr. Martenson's *Crash Course* video series explores the intertwining significance of the “three E’s”—the economy, energy, and environment and offers articulate, dynamic insight into the workings of the monetary system.

Chris earned a PhD in neurotoxicology from Duke University, and an MBA from Cornell University. A fellow of the Post Carbon Institute, Chris's work has appeared on PBS and been cited by the Washington Post. He is a contributor to SeekingAlpha.com.

Chris is an accomplished presenter who has offered the *Crash Course* seminar all over the United States. The online course has been translated into several languages, and been viewed over 1.5 million times.

His website (see below) offers both daily free content as well as a newsletter service for enrolled members. His goal is to help as many people understand that we are in the midst of a profound economic shift, and that equally profound risks and opportunities lie in our future. For those that can see them coming, tremendous advantages exist.

www.peakprosperity.com