ASPO 2009
Inconvenient Truths

Chris Nelder's Snapshot on Where we are energy-wise

The current player's stances.

Commentary: The Great Divide on Energy Policy
By Chris Nelder
Oil industry representatives pleaded for a transparent and fact-based public dialogue about our energy options for the future, saying we should step away from the all-or-nothing debate on fossil fuels vs. renewables. Yet those same executives complained bitterly about the policymakers who impede their progress. They discounted the potential of renewables and made overblown claims about how technology will always provide more oil. They clearly favored a political approach to the climate change issue over objective scientific analysis. I heard not one word suggesting that oil production may have in fact peaked, nor any mention of decline rates.

Lack of Communication

- In my experience, the green side of the debate is no better. They seem to have as little appetite for the facts on fossil fuels as the fossil fuel industry has for objective evaluation of renewables.

What I see is both sides of the debate retreating to their corners, throwing up walls of propaganda, and demonizing the other side. It is most emphatically not a neutral and balanced dialogue. It is the art of political compromise, not data, which continues to drive policymaking.

The oil and gas industry remains mired in denial about the peak and decline of its products. Renewable advocates are still lost in a dream about quickly replacing fossil fuels with green energy and an infrastructure that runs on it. Noeither side trusts the other.

Rapid, radical change is necessary

1. We have extracted nearly all of the world's easy, cheap oil and gas, and now we're getting down to the difficult, expensive stuff. As a result, global oil production has for all intents and purposes peaked. Natural gas production will also peak in 10 to 15 years. Neither technology nor high prices will change that. Therefore we must begin to replace those fuels with renewables, and use what remains much more efficiently, with the expectation that most of the world's oil and gas will be gone by the end of this century.

New reserves are stopgap steps.

2. Drilling for oil and gas in the OCS and ANWR must and will be done; our need for those fuels is simply too great. An additional 2-3 mbpd will put a dent in the roughly 12 mbpd the US now imports, but if we drill for it now, the first wave won't hit the market for 10 years or more. By that time, it probably won't compensate for the depletion of conventional oil in North America, nor will it do much to reduce prices. But it will be crucially necessary, and producing it won't make an ugly environmental mess.

Wishful thinking ignores EROI

3. Renewables are clearly the long-term answer, as is an all-electric infrastructure that runs on its clean power. However, it will likely take over 30 years for renewables to ramp up from a less than 2% share of primary energy today to 20% or more. They probably won't even be able to fill the gap created by the decline of fossil fuels. Oil and gas currently provide about 58% of the world's primary energy, and they will remain our primary fuels for a long time to come.

Big solution: just do with less...

4. It will take many decades to reconfigure our transportation systems to run on electricity. It will take decades to fix our wasteful and leaky built environment so that it doesn't need as much energy to begin with. None of the solutions will come quickly or easily.

Independence of localization?

5. Neither renewables nor fossil fuels nor nuclear power alone can bring “energy independence.” Indeed, if independence means isolating ourselves from the rest of the world’s energy commerce, it might not even be desirable.

Multi-pronged Strategies

6. We must pursue *all* sources of energy immediately and aggressively if we hope to meet our future needs. Pitting one against another is counterproductive.

Nuclear, yes, but it also is finite.

Nuclear power will not grow significantly in the next several decades, as nearly all of the existing reactors will need to be decommissioned within the next 20 years, and a new generation of reactors must be built to replace them. A renaissance for next-generation nuclear energy may be possible, but only after we have confronted the crises of peak oil and peak gas. It may produce no net reduction in emissions at all.

Earth to people: just cut back.

8. Climate change must be confronted via a unified policy on emissions and energy supply. In our zeal to control emissions, we must take care not to squelch the production of the oil and gas that constitutes the majority of our energy supply, at least until we have something to replace it. To do so could have unintended and paradoxical consequences. Rather than emphasizing the uncertainty on climate change data, and fomenting fear about the cost of mitigation, the fossil fuel industry should submit to neutral scientific analysis.

Use old data but do not accept linear planning assumptions

9. We should use accurate and unbiased models of the future growth and decline curves of all forms of energy for policymaking--models based on historical data, not faith. If the data says we're likely to recover another 1.2 trillion barrels of oil worldwide and no more, then we should not assume that future drilling and technological progress will somehow turn that into 3 trillion barrels of recoverable oil.

All Solutions are Expensive
It is the end of Cheap Energy

10. Carbon emissions will soon come with a price. Drilling the remaining prospects for oil and gas will be expensive. Deploying thousands of wind turbines and solar systems will be expensive and slow. Replacing millions of inefficient internal combustion engine vehicles with electric and plug-in hybrids will be expensive. Rebuilding the nation's rail system will be hugely expensive. In short, *all* the solutions going forward will be expensive.

WE are not advancing....

- I share the industry's concern about energy illiteracy, but it cuts both ways. It's true that as long as oil and gas provide the majority of our energy supply, we must continue to invest and drill for it. But to claim that limits on drilling are the only problem, or that renewables cannot provide the energy we need in time, exploits that illiteracy and deliberately confuses the debate.

Neither the fossil fuel industry nor renewable boosters are yet willing to work with each other to develop a truly viable path forward on energy. Until both sides put aside their exaggerated claims and partisan bickering, the public will remain confused about the true options and continue to use politics, not neutral data, as their guide. That cannot produce good policy, and it does all of us a grave disservice.
Such unhelpful contentiousness, denial, and cheating on the numbers is a luxury we can no longer afford. Our energy and climate change problems are real, they're urgent, and they're getting more so every day. It's time to set the tactics of the last war aside, wring politics out of the dialogue, and start grappling in an honest and direct way with real solutions. Nothing else will do.

Chris Nelder is an energy analyst, investing journalist, and blogger who writes about energy issues. He is the author of a book on investing in peak fossil fuels, **Profit from the Peak: The End of Oil and the Greatest Investment Event of the Century**.

Quote of the Week

- "When I became president, the average gas mileage on a car was 12 miles per gallon, and we had mandated, by the time I went out of office, 27.5 miles per gallon. But President Reagan and others didn't think that was important, and so it was frittered away."

-- Jimmy Carter, former U.S. President, testifying before a Senate committee

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- *In Vancouver, go to www.vancouverpeakoil.org*
- *For Strategic Sustainable Planning workshops and past slide shows dealing with Global Impacts of Peak Oil, Climate Change, Rising Oceans and Mass Migrations, see SSP series and others on www.plancanada.com*