

Email of the day (1) - [On US shale reserves \(from Switzerland\)](#):

"This is earth-shattering if true...how can it be? Can you please check this out through the Collective? This changes the world, potentially...USD 37 trillion of non-tax revenues! You hardly need to tax the [wealthy] on top. USA better than slow growth Euroland too...see UK turning around on shale too?"

"A thought provoking quote from Wikipedia (I take no responsibility for authenticity etc):

A stretch of largely vacant federal lands in Utah, Wyoming, and Colorado may hold more recoverable oil than all the rest of the world put together. That is what Anu Mittal, Director of Natural Resources for the General Accounting Office, informed the House Science Subcommittee on Energy and the Environment in her written testimony on May 10:

The Green River Formation - an assemblage of over 1,000 feet of sedimentary rocks that lie beneath parts of Colorado, Utah, and Wyoming - contains the world's largest deposits of oil shale. USGS [U.S. Geological Survey] estimates that the Green River Formation contains about 3 trillion barrels of oil, and about half of this may be recoverable, depending on available technology and economic conditions.....

Because this oil is largely on federal lands, an enormous amount of federal revenue could be generated through lease options and royalty payments without raising tax rates at all.

How much? The standard royalty payment in the oil and gas business is "one-eighth of production free and clear of costs" or 12.5 percent of the value of the oil extracted. Assuming that the 3-trillion barrel figure is accurate and that the price of oil remains in the neighborhood of \$100 per barrel, then the federal non-tax revenue from royalties alone could be as high as \$37.5 trillion. However, that figure is no doubt an overestimate of revenue. As more oil is extracted, the price of oil will drop, and hence it will not be economically feasible to recover more of the oil at that point.

But even if only 30 percent of those royalty revenues flowed into the U.S. Treasury, that would be enough to pay off the entire national debt without raising tax rates or cutting federal spending. Moreover, state taxes on oil and gas produced would enable state governments to keep tax rates low without affecting government operations....

"Wow! That makes the glass look half full from an economic point of view - or half empty from an ecological one - depending on your take..."

"View full article on Wikipedia under Green River Formation oil shale..."

My comment - [I understand your excitement; the implications of the Wikipedia article are astonishing.](#)

[There is also an informed second email on this subject, also from Switzerland.](#)

Email of the day (2) - [More on the US shale deposits in Federal lands:](#)

"Here is the [written testimony](#) before the House of Representatives dating back to May 2012.

"1) One may wonder why this is going out now? (Elections ended and lobbying Obama?)

"2) In any case gas shale is already a game changer and if my calculations are right (based on assumptions commonly reported on future gas production), the US will see its trade balance improve in the tune of \$450 bn a year by 2025, i.e. +3% of GDP coming above trend. The energy cost advantage the US is enjoying relative to the rest of the productive world will compound this (gas price ratio between Europe and the US or Asia and the US is 3:1/4:1; spread between Brent and WTI is 20%). I feel this is not yet discounted by markets.

"As you know, this made me turning bullish on the US (and not only for real estate) despite mounting debt (and do not forget student loans...) and despite all uncertainties surrounding long-term forecasts."

My comment - This email was kindly contributed by Pascal Morin of P&C Global Wealth Managers SA.

I am not sure why this item is surfacing now. However, a quick review of the testimony linked above suggests that the development of this vast site on Federal lands will be strongly resisted by not only environmentalists in the USA, but also elsewhere, lest it open doors in their own countries. Moreover, there will be at least covert support from conventional oil producing countries, increasingly aware that vast supplies of shale oil and gas reserves around the world now have the potential to weaken considerably the economies of oil producers who previously felt the world was at their mercy.

Personally, I would be surprised if the Obama administration opened the door to development of shale reserves on Federal lands, since that would be a radical change from policies during his now expiring first term. Moreover, unconventional oil and gas production is still surging in privately held regions of the USA. Additionally, technology breakthroughs such as horizontal drilling are extending production from conventional fields.

I do expect that shale reserves on Federal lands will eventually be granted development rights by future US presidential administrations. More importantly, as far as other countries are concerned, including the UK, we are still in the foothills of global shale oil and gas development. Its importance cannot be overemphasised. Countries which choose to develop their shale oil and gas resources in the years ahead will improve their economies by stimulating growth and lowering government debt.

Lastly, environmentalists will continue to have concerns about a whole new era of fossil fuels development. They need to be developed responsibly, not least because of risks to the environment. However, an increasing number of countries are aware of these risks. The pace of technological innovation will continue to enable cleaner extraction of these essential resources, while also lowering their emissions when consumed as fuel.

The fact is, green technologies are not yet capable of replacing fossil fuels. However, their development will continue, as it should. In another 20 or 30 years we will be much more dependent on them, and they will work more efficiently. Meanwhile, this developmental process is at a more advanced stage for nuclear power, the cleanest and / or least obtrusive energy source of all, once the dangers of old nuclear are largely removed.

See also the enlightened email on 6th December: [Molten Salt Nuclear Reactors](#), provided by a most knowledgeable delegate at Eoin's last Chart Seminar in London. See also Eoin's item on nuclear below.