

**Today's Notes:**

1. **Game Changers**
2. **Hard Rock Mining**

**1. GAME CHANGERS**

I apologize for discussing Thomas Friedman line again. But this AM again he intones in the New York Times that we have a potential solution to the problem of our time. In an article titled "*The Next Really Cool Thing*" Mr. Friedman says,

*"What if a laser-powered fusion energy power plant that would have all the reliability of coal, without the carbon dioxide, all the cleanliness of wind and solar, without having to worry about the sun not shining or the wind not blowing, and all the scale of nuclear, without all the waste, was indeed just 10 years away or less? That would be a holy cow game-changer."*

His op-ed article is worth a read. One might say, "If only God would be good to us and miraculously hand over a laser-fired fusion power plant," all would be well. Immediacy of impact or game changer status is point 4 on my ten point Discovery Grid. Great Discoveries (such as an effective cancer treatment or laser fusion) are game changers. Cheap, clean available domestic energy would indeed be a "holy cow game-changer." These are the discoveries that I seek in my Discovery Investing discipline. You see everything – and I mean everything – in our grandchildren's future well-being depends on cheap, clean and available energy. It is by far the most important factor in a rising (or in its absence, a declining) Quality of Life. It affects productivity and health care directly.

The Obama Administration has set priorities a little differently. It now seeks clean, available and more expensive energy for the US security. So in the context of Discovery Investing we really do need a Game Changer such as the laser powered fusion device that Mr. Friedman recommends. Lawrence Livermore first fired up 192 lasers at its Fusion Ignition Facility last Monday. The next step, he notes, is to ignite a tiny pellet of frozen hydrogen with 800 million degree Fahrenheit heat generated by the lasers. He believes that the first attempt at this is two to three years away and that an operating facility is at least a decade away. For the sake of conservatism let's say such an event is at least two decades away before it can impact our energy goals. What will we do in the meantime for the cheap, clean and secure availability of energy to support the quality of life and freedoms that Mr. Obama wishes to maintain (universal health care is expensive)? This is a rhetorical question of course. Drilling in the US has virtually ceased. Devon's natural gas rig counts have fallen from 25 to 8 since July. The gas industry believes that it will require 18 to 24 months after an economic recovery to bring significant production back online.

We are far more energy-dependent on our adversaries than we were last July. For example Russia and China are developing Venezuela's Orinoco oils with technology and financing. Russia says she will join OPEC. Meanwhile Mr. Obama's Interior Secretary now blocks gas drilling and offshore oil production. Bill HR699 is now in committee to restrict mining of

hard rock metals in the US and impose an 8% gross royalty on mining. This is all a gigantic gamble by the Administration to go “green.” But what if it fails? No other country is now committed to this strategy. This past week Russia encouraged non-OPEC producers to join in cutting oil production. Surely you can see where we are headed?

Nevertheless, Mr. Friedman is, in part, correct and I support his investment thesis. We need Game-Changers. That is why I developed Discovery Investing as a discipline. Game changing Discoveries come in many sizes and varieties. There are discovery game changers for the economy. A cure or effective treatment for diabetes or cancer comes to mind. That is why I have spent the past 6 years carefully studying Senesco Technologies (SNT AMEX). There are game changers for industry sectors such as shale gas extraction and leaching technologies for precious metals. Last, but surely not least, there are game changers for mom and pop who now fret that college education may be out of the question for Jimmy and Sally. The Israelis seem to have a potential near term game changer in their recent natural gas discoveries. Let’s be honest though – not all technologies and discoveries turn out to be game changers so diversification as Mr. Friedman suggests is of paramount importance.

My good friend Mark Cox, who manages the New Energy Fund LP in New York, with whom I have respectfully disagreed in the past only on implementation of these “game changers”, invests in many of these technologies. May I recommend his fund? One of these days, one (or more) of these technologies will indeed be valued as a game changer. For mom and pop I suggest, in the Discovery Investing sense that if only one “game changer” comes to fruition it will positively impact your life. This is a cornerstone of Discovery Investing.

But reality is a cruel taskmaster as well. Reality operates in the opposite direction of discovery. Most world class discoveries have a delayed impact on fundamentals. Most delays are of several years in length. The world economy is now spiraling downward despite the recent dead-cat bounce of the stock markets. I agree with Mr. Friedman (and Mr. Cox) on the need to invest in these technologies. But as a pragmatist I worry about what we will do in the next week, month and year to support our security and the lifestyle of our loved ones and special legacy causes.

Mr. Friedman suggests that in the meantime (the ten or twenty years before we can actually have fusion energy) we need to install solar panels and windmills. Cap and trade on carbon emissions, a center piece of the Obama platform (it will raise him \$600 to \$700 billion to help universalize US health care, a \$3.6 trillion program), he notes will make solar and wind technologies competitive. But these radical decisions by the Obama Administration will not provide cheap energy and scientists are at loggerheads about whether or not such systems will provide as much as the 20% of electrical energy provided by our aging but reliable and cheap nuclear fleet. There is great uncertainty for the US economy impounded in these plans. Mr. Friedman concludes.

***“At the pace we’re going with the technologies we have, without some game-changers, climate change is going to have its way with us. Yes, we’ll still need coal for some time. But let’s make sure that we aren’t just chasing the fantasy that we can “clean up” coal, when our real future depends on birthing new technologies that can replace it.”***

I make two points. Almost every where else on this blue (not green) planet science is surging ahead with nuclear game-changers. The Russians and Japanese developed a breeder

system that consumes almost all the fuel. This is Mr. Friedman's sole objection to nuclear energy – spent fuel storage. These reactors operate now. In fact there is much less uncertainty about third and fourth generation nuclear technology than fusion reactors. Nuclear energy provides ~20% of the world's electricity. Once in operation, despite high initial costs, nuclear energy provides the cleanest and cheapest form of energy available. The fuel is abundant. Both thorium and uranium are widespread in the US and Canada. Finally, within 10 years we could have half a dozen 3<sup>rd</sup> or 4<sup>th</sup> generation nuclear reactors in operation if we chose to move ahead aggressively. Nuclear energy provides not only electricity but also heat energy and hydrogen. A renewed nuclear industry would employ some of the 4 million new jobs that Mr. Obama says his economy must provide.

If, as Mr. Cox, of the New Energy Fund has suggested, lithium-ion and other battery technologies become ubiquitous in the next decade (I agree and am invested) we will need clean cheap, and readily available nuclear energy. Today, notwithstanding game changers, it is the only feasible energy alternative that satisfies all the objectives. Mr. Obama's geopolitical alternative, even in the next decade, is to increase US oil dependence on our global adversaries for above the current level of 67% of our demand.

Mr. Friedman says,

*“Let's make sure that we aren't just chasing the fantasy that we can “clean up” coal.”*

Is nuclear fusion not another “fantasy,” even though it might become a game changer? We must recognize the reality of our situation and act now. Yes invest in Friedman's vision of nuclear fusion even though we have thirty years of investment already in nuclear fusion with little progress to show. Solar, geothermal and wind have an important place but they are not game-changers. This country badly needs a game changer today. It is unlikely that current renewable energy plans can deliver that.

## **2. THE NEW MINING LAW**

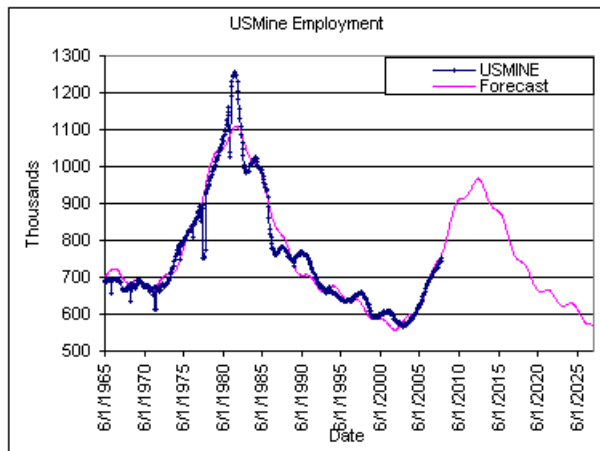
I encourage each of you to write to your Congressmen and Congresswomen to protest the passage of Bill HR699 (The Hard Rock Mining and Reclamation Act of 2009) now in Congress. Congressman Nick Rahall of West Virginia is the lead on this bill. This bill will damage all mining in the United States much in the same way carbon cap and trade will damage the country. It is punitive and will increase our dependence on foreign sources of supply. Miners will simply pack up and go elsewhere – perhaps where environmental controls are not as restrictive.

I am trying to reason in my own very finite mind why we are taking this path. I understand the need to preserve the nation's parks. I understand the move to preserve the environment. I also believe that industries should be fairly taxed. However both the energy and hard rock mining sectors produce significant wealth in this country. They also supply significant jobs. This is a consideration not entirely unimportant with a U-6 unemployment rate of 14.8% and increasing each month.

We are about to embark on a significant infrastructure buildout in the US. This is not the high speed rail line from Disneyland to Las Vegas recently proposed as “shovel ready” in the Obama budget, but a new electrical grid. It is badly needed and will become a

significant resource of the country. The auto industry is in dire straits. We shall soon see whether it is put into bankruptcy or allowed to linger among the living dead. Cars need copper, aluminum, molybdenum and silver among other metals. Batteries need lithium ... you know the story. If we restrict mining with a punitive bill we will lose jobs expertise and we will destroy the wealth we might have created at home. That wealth will be exported elsewhere much as our profligate energy uses and failed policies for the past 50 years have exported our wealth to the OPEC's of the world. For the new electrical grid or the fusion reactors Mr. Friedman dreams about where will the copper and exotic metals be sourced?

The big copper porphyries of Arizona and Utah will be taxed and this will retard, delay or worse, destroy production potential. Obviously employment of some 500,000 workers will be impacted more quickly than this chart from 5/25/08 shows.



Nevada's Senator Reid had better hope his Disneyland high speed rail link works.

In our Discovery Investing quest we will have no choice but to shift our focus north to Canada. Ontario, Quebec and British Columbia offer significant opportunities for hard rock mining even though many of these commodities are now depressed. Quebec is especially attractive for its tax system. Saskatchewan is the new star in Canada. Saskatchewan boasts potash, uranium, gold, lignite coal, farmland and oil sands and a will to move forward. I will be conducting a seminar in Saskatoon in early May. Canadian Discovery names as well as commodities will stand to benefit from such a punitive US mining bill if it passes into law. much as the OPEC nations have benefited from our failed energy policies.

Here is a synopsis of the energy bill. Please read it and call your Congressman to suggest the alternative. One question as mentioned in the Bill. If I become a complainant and wish to remain anonymous do I get to wear a black hood during the inspection of the property by the Secretary? All in jest of course!

- *Casual use would be redefined to allow only those activities that do not cause "any disturbance of public lands and resources." The collection of samples, use of gold pans and non-motorized sluices would be the only activities allowed without a Notice or Plan. Taking a vehicle off-road would also require a Notice or Plan. Any extraction of minerals for sale or use would require a Notice or Plan.*
- *H.R. 699 would be retroactive. Existing mining that is not already operating under a Notice of Plan would require proof of a valuable discovery to retain a mining*

*claim, and those operating under a Notice or Plan would have ten years to bring their operation under compliance with the new regulations.*

- *The patenting of mining claims, which has been suspended by yearly legislation since 1994, would be permanently discontinued.*
- *The federal government would be entitled to an 8 percent gross royalty for all locatable minerals for any new mining operation. Even if the miner is unable to make a reasonable profit at current commodity prices, he would have to give 8 percent to the federal government. Existing operations at the time the bill is passed would be subject to a 4 percent gross royalty, and any federal lands added to the operation after enactment of the bill would be subject to the 8 percent royalty.*
- *The reporting requirements are absurd. Anyone transporting a locatable mineral, concentrate or product derived from a locatable mineral shall carry documentation declaring the amount, origin and intended destination. Miners shall create and maintain reports relating to the quantity, quality, composition, volume, weight and assay value of all minerals extracted from a mining claim. Failure to produce these reports when requested by any officer or employee designated by the federal government may result in involuntary forfeiture of the mining claim.*
- *The federal government would be authorized to conduct audits of all claim holders, operators, transporters, purchasers, processors, or other persons directly or indirectly involved in the production or sales of locatable minerals.*
- *Mining claim maintenance fees would be raised to \$150 per claim, and would be adjusted at least every five years based on the Consumer Price Index. The location fee would be increased to \$50 per claim.*
- *Tens of millions of acres would be added to existing areas that are already off-limits to mining, including Wilderness Study Areas; areas of critical environmental concern; areas designated for inclusion in the National Wild and Scenic Rivers System; areas designated for potential addition, or eligible for inclusion; and any area identified in the set of inventoried roadless maps contained in the Forest Service Roadless Area Conservation Final Environmental Impact Statement, Volume 2, dated November 2000.*
- *Any State, political subdivision of a State, or Indian tribe could petition the Secretary of Interior to withdraw areas based on drinking water supplies, wildlife habitat, cultural or historic resources, scenic vistas or other similar values. Indian tribes could also petition for the withdrawal of areas for religious or cultural value.*
- *The bill would give the Secretary the authority to deny any operation that may cause undue degradation.*
- *To get an approved Plan, the operator would have to be able to show that no treatment of discharged water will be necessary 10 years after mine closure, and any Plan could be changed or halted if additional information about scientific, cultural or biological resources becomes available.*

- *The miner would have to submit an application to the federal government to request any cessation of operations greater than 180 days. A miner would have to obtain consent of the federal government to transfer ownership of any operation, and the transfer would require a fee to be paid to cover the government's administrative costs.*
- *Financial assurance (bonding) would be required for any operation—presumably this would also apply to suction gold dredging—and the amount would be evaluated and adjusted every 3 years. Where water treatment is necessary, financial assurance funds would not be released until there is 5 full years where treatment is not necessary.*
- *States would be allowed to implement regulations that exceed the regulations in this bill.*
- *The federal government would be allowed to collect administrative fees to cover expenses incurred while regulating mining operations.*
- *Mining operations would be subjected to a minimum of one complete inspection per year.*
- *The bill would provide environmental lawyers an unending source of income. Any citizen would be allowed to file a civil lawsuit against the miner or the federal government to force compliance with the mining laws after giving sixty days written notice. The court would be allowed to award the costs of litigation, including attorney and witness fees, as the court deems appropriate.*
- *Any miner who fails to comply with any portion of a permit would be subjected to a fine of \$25,000 per day.*
- *Any citizen who believes they are being adversely affected by a mining operation could request an inspection. If the Secretary agrees that an inspection is warranted, the complainant would be allowed to join in the inspection. Complainants could remain anonymous if desired.*
- *Any person who engages in mineral activities without the required permit, if convicted, would be punished by a fine of not less than \$5,000 per day or by imprisonment for up to 3 years or both.*
- *Designated employees of the Department of Interior and Department of Agriculture would be given full law enforcement powers over permitted miners, including the power to subpoena miners to force attendance, testimony, and disclosure of all paperwork, and warrantless searches of vehicles and buildings expected to contain locatable minerals or products derived from them would be allowed.*
- *The Secretary would be forced to prevent mineral activities that could have an adverse impact on the resources and values of National Conservation System Units.*

The legislation is co-sponsored by Reps. George Miller (D-CA), Henry Waxman (D-CA), Ed Markey (D-MA), Howard Berman (D-CA), Raúl Grijalva (D-AZ), Rush Holt (D-NJ),

Jim Costa (D-CA), Donna Christensen (D-VI), Pete Stark (D-CA), Dale Kildee (D-MI), Maurice Hinchey (D-NY), Earl Blumenauer (D-OR), Patrick Kennedy (D-RI), Ron Kind (D-WI), Lois Capps (D-CA), Adam Schiff (D-CA), Mike Honda (D-CA), John Salazar (D-CO), Anna Eshoo (D-CA), Niki Tsongas (D-MA), and Gerry Connolly (D-VA).

The legislators who have sponsored this bill should be labeled as un-American, voted out of office, and sent packing for attempting to decimate one of the few industries that has managed to stay afloat and provide an honest paycheck during these tough economic times.

Please take a minute to contact your Representative and Senator to let them know your stance on H.R. 699. Better yet, why not start a recall effort if one of the bill's sponsors is in your area, or stop by their local office for a bigger impact?

Contact information for each of the bill sponsors:

- Nick Rahall (D-WV) phone 202 225-3452
- George Miller (D-CA) phone 202 225-2095
- Henry Waxman (D-CA) phone 202 225-3976
- Ed Markey (D-MA) phone 202 225-2836
- Howard Berman (D-CA) phone 202 225-4695
- Raúl Grijalva (D-AZ) phone 202 225-2435
- Rush Holt (D-NJ) phone 202 225-5801
- Jim Costa (D-CA) phone 202 225-3341
- Donna Christensen (D-VI) phone 202 225-1790
- Dale Kildee (D-MI) phone 202 225-3611
- Maurice Hinchey (D-NY) phone 202 225-6335
- Earl Blumenauer (D-OR) phone 202 225-4811
- Patrick Kennedy (D-RI) phone 202 225-4911
- Ron Kind (D-WI) phone 202 225-5506
- Lois Capps (D-CA) phone 202 225-3601
- Adam Schiff (D-CA) phone 202 225-4176
- Mike Honda (D-CA) phone 202 225-2631
- John Salazar (D-CO) phone 202 225-4761
- Anna Eshoo (D-CA) phone 202 225-8104
- Niki Tsongas (D-MA) phone 202 225-3411

- Gerry Connolly (D-VA)            phone 202 225-1492

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