Sustainability Didn't Catch On – Now What? By Loren Bergeson, October 17, 2010

Even conservative columnist George Will recently expressed his surprise that absolutely zero pro-sustainability legislation has been passed since Barack Obama was sworn in as President. The recent Copenhagen climate change conference is widely accepted as being a failure. It seems reasonably clear that sustainability will not catch on soon enough, in a big-enough way world-wide, to make any significant difference in avoiding various unpleasant outcomes.

It seems most of the sustainability movement is concerned about climate change, which is certainly something to be concerned about, but it now appears that there are two others issues whose impact may soon become larger than the early impacts of climate change which are already apparent. These issues are resource depletion (especially Peak Oil) and the on-going international financial situation, which seems to take two steps backward after each tentative step forward.

I recently found a paper by a Peak Oil expert named Gail Tverberg which explains the situation far better than I ever could. I got her permission to quote and reprint her work in its entirety, so forgive me for reading this text out loud, but I simply can't imagine a better way to explain the near-term predica-ment we face concerning energy resources. I now quote from Gail Tverberg's paper, which has the rather lengthy name of:

Systemic Risk Arising from a Financial System that Requires Growth in a World with Limited Oil Supply, by Gail Tverberg, FCAS, MAAA

It seems to me that if we are in fact reaching limits with respect to oil supply, this should be of considerable concern. We have a financial system that demands economic growth, for reasons that will be discussed later in this paper. At the same time, as we approach limits with respect to oil production, the ability of the world's economy to grow becomes constrained, because in order for economic growth to occur, we will need to do more and more, with less and less oil.

The conflict of these two forces – a need for economic growth in a world that can no longer provide growing oil supply – sets the financial system up for a systemic risk of collapse. Furthermore, there is significant evidence that the financial problems of 2008 were early signs of this systemic risk affecting the financial system. If oil supply should actually begin to decline in the future, we can expect financial problems of 2008 to return and worsen.

Oil's Connection to the Economy

Oil is used for a huge number of purposes—transportation fuel, heating fuel, fuel for extracting minerals of all types, lubricant, and raw material for asphalt for road paving, plastics, synthetic cloth, medicines, fertilizer, pesticides, and herbicides, to name a few things. A declining oil supply, or even a level supply, should be a serious concern, with the world's rising population.

In recent years, there have been many attempts to try to find substitutes for oil, but with very limited success. Ethanol from corn has probably been the biggest success, but in 2009, its use in the US amounted to only 660,000 barrels a day, compared to total consumption of oil products of 18.8 million barrels a day, or 3.5% of the total. Raising this per-centage is proving difficult for several reasons: manufacturers' warranties only permit the use of 10% ethanol in gasoline; ethanol tends to be more expensive than gasoline without subsides; and there are relatively few stations offering E-85 gasoline.

Other so-called replacements for oil are only very partial replacements, and are still very far away from being full-scale solutions. Biofuel from algae is being investigated, but it is still very expensive, and not yet scalable. Electric cars are being developed, but they still are many years from being ready to replace our huge fleet of cars with internal combustion engines.

It should be noted that the problem with oil supply is really an economic one. There is a huge amount of oil theoretically available—in the oil sands in Canada, for example, and in the oil shale in the US west, and perhaps in the Middle East. But in order for this oil to be available now, huge investments would need to have been made starting at least 10 years ago. Also, in order to justify this investment, the cost of the finished oil products would need to be very high—high relative to the energy required to extract the oil, and high relative to people's salaries. At some point, limits are reached in the amount people can afford to pay for oil, and we may already approaching those limits.

Timing

Many observers would like us to believe that limits on oil and other resources are still a long way off, but this is not really true. World crude oil production has already stopped rising. Oil production has been essentially flat from 2005 to 2010, meaning that more and more cars and trucks must compete for the same fuel supply.

Impacts

While crude oil supply has not yet begun declining, it had been essentially flat since 2005, and this lack of growth is putting tremendous pressure on the world's financial system, since we now must do more and more with essentially the same oil supply. Oil prices have risen, and this is one source of financial problems, because higher oil prices have a disruptive impact on balance of payments, and can also cause a reduction in profits of companies.

But higher oil prices can also lead to recession and debt defaults. High oil prices don't give ordinary citizens more salary to spend, so they have to cut back on something else. One possibility is a cutback in discretionary spending, which will tend to lead to recession. If the cutback is in buying new homes, the price of new homes can be expected to drop. James Hamilton wrote a paper called, "Causes and Consequences of the Oil Shock of 2007-2008" showing that the run up in oil prices in the years prior to 2008 was sufficient to cause the major recession we have recently experienced.

If oil prices rise, they may also cause debt defaults. This occurs because people's salaries don't rise correspondingly, so they need to cut back somewhere, and some will default on debts. Businesses may also be more at risk of debt defaults, if their cash flow is declining. The lower values of homes may also play a role in increasing defaults.

While one cannot prove that the aforementioned problems were the only causes of the financial crisis of 2008, there is certainly a strong similarity between the expected problems and the types of problems we have recently seen.

It should be noted, too, that a seeming over-supply of oil should not be surprising. As higher prices give rise to recession, this causes a cutback in demand. Reduction in credit availability also tends to reduce demand. So the oil available may be more expensive than what individuals and businesses can afford. If the oil available were cheaper, the oversupply would disappear.

Economic System's Need for Growth

Our current economic system includes a huge amount of debt. Money is loaned into existence. Debt is used to finance many business expansions. Governments rely heavily on debt.

The US economy has been growing for many years, with only brief interruptions, so nearly all of our experience with borrowing money, and paying it back with interest, has been during periods of economic growth.

Borrowing from the future is relatively easy when the economy is growing, because when the time comes to pay back the debt, the debtor's economic condition is likely to be as good as it was when the loan was taken out, and may even be better. So defaults are relatively uncommon, and the growth in the economy between the time the loan was taken out and the time it is repaid provides some contribution toward the interest payments.

But what if we start encountering a very different kind of world, one with a decline in oil supplies? If oil resources constrain economic growth, debt defaults can be expected to rise, and the whole debt system underlying our financial system is at risk. Insurance companies are very much at risk too, because many of their assets are bonds. In the past, these bonds would have been repaid with interest, but in a world with little economic growth, and perhaps economic decline, the risk of default becomes much higher.

Even if we should discover a way around our problems—say a new technology, which permits more oil extraction at lower cost, or a better substitute for oil, financial institutions–including insurance companies–are still likely to encounter substantial systemic risk related to debt defaults in the next few years.

END OF GAIL'S PAPER

Next I'd like to quote from Chris Martenson, who used to be a highly paid Vice President working for a Fortune 300 company (Pfizer, Inc.), but now spends all of his time warning to whoever will listen that we should prepare for the upcoming 20 years to be completely unlike the previous 20 years. It would appear that other Fortune 300 insiders are also worried. Here's a rather interesting statistic: For the week of October 4 2010, the insider selling to buying ratio was 2,341 to 1 with insiders selling $400+ million in stock and only buying a measly $170,000. This comes on the heels of September 27's equally insanely bearish ratio of 1,411 to 1 (which by the way was preceded by weeks with ratios of 250 to 1 and 650 to 1).

In plain terms, corporate insiders, the folks who know their business and its prospects better than anyone are dumping shares as fast as humanly possible.

But let's get back to what Chris Martenson says. Chris says, and I quote, "It is my informed opinion that there is no 'fix' to our current predicament – there are only outcomes to be managed." I'd like to say that again because that sentence is the main point I'm trying to convey in this morning's message. [Repeat]. In other words, taking political action to try and sustain our current way of life is likely a waste of time, because business as usual simply cannot be sustained for much longer, and we need to prepare both mentally and physically for a very different future. How long do we have? I'll quote a certain member of the U.S. Congress, who shall remain nameless since our private conversation was off the record: "An economic collapse could happen tomorrow or it could happen 10 years from now – but what's certain is that it is inevitable given the course we're on right now."

But again I digress from Chris Martenson's message. Let me continue to quote from him.

BEGIN QUOTE FROM CHRIS

"Unless some brand-new energy source is discovered - preferably about 15 years ago and prosecuted with all due haste - the necessary liquid fuels will not be there to power enough new economic development to cover all the past debts and unfunded promises. While this does not necessarily mean the "end of the world," for many it will certainly mean "the end of the world as they know it."

This is not some future prediction; it is already reality for many people:

The record number of uninsured Americans;

Pensioners relying on busted pensions;

The unemployed over 50 who fear never working again;

The record number of people hit with foreclosures and repossessions;

Food stamps hit 40.8 million.

Lying just beneath those headlines are stories of hardship and difficulty, writ large. Of course, even these dismal (and predominantly US) statistics pale when compared to the pain being experienced in Greece, Ireland, Iceland, Spain and Portugal (and, soon enough, in the UK, France, Japan, and the US).

As I've mentioned previously, developing your personal resilience —putting on your oxygen mask first— is your number-one priority. This puts you in a stronger position to assist others if or when the time comes. But the transitions that are coming will be physically and emotionally challenging for many, and this is where community comes in. Yes, we can individually prepare our root cellars and our portfolios, and we should, but the most important work is going to rest with our abilities to help and rely on others. For some, the pieces are already fully in place, with intact communities and deep relationships. For others, almost everything needs to be created in place.

For the people impacted by the events in the headlines above, the need for emotional support can easily outweigh the need for physical items.

Thinking of your resilience strategy in terms of ‘we’ instead of ‘I’ is not only necessary, but actually quite desirable. There are many reasons to enhance the quantity and quality of your relationships and network—emotional support, learning new things, buying in bulk, etc—but perhaps the most important one is the feeling of being part of a movement. History has proven again and again that real, systemic change rarely happens from the top down through presidents, prime ministers, congresses, and parliaments, but from the outside in.

You will need community, more than ever. So get started.

END QUOTE FROM CHRIS

Of course, a disruptive future is not a certainty, rather it is a probability. What are the odds? Nate Hagens puts it this way:

BEGIN QUOTE FROM NATE

Given the constraints in natural resources, our currently unprecedented levels of debt on a global scale, and the absence of ideas for the next grand "leap forward" for mankind, it seems plausible that we might have to bid adieu to economic growth, and not just for a year or two, but for a long time. Some models suggest the chances for steady economic growth after 2010 are below 10-20%. Even if you disagree with such low odds and put the probability for "more growth" to, say, 80%, doesn't it seem a bit irresponsible to not at least consider the other 20%? Not buying insurance for a risk that might hit you with some pretty negative consequences strikes me as not the best strategy. Consider that we buy house insurance, and there’s only a 1.5-2% chance we’ll have a significant claim over a 10 year period. We buy car insurance, and there’s only a 3-4% chance we’ll have a significant claim over a 10 year period.

END QUOTE FROM NATE

It appears that there’s a not insignificant chance there will be economic disruptions over the next 10 years. So how do we buy insurance for it? Unfortunately, it’s not as easy as writing a check. It takes not only money, but time to build new skills and a new mindset. This is very difficult to do in isolation – we need each other to accomplish this.

So what should we be doing? First of all, we need to gather to offer each other support as we deal emotionally with these new realities. There are various stages of grief we have to go through to adjust ourselves to the possibility of future upheaval. Secondly, we need to make sure that if there are disruptions with our highly complex just-in-time supply chains, we’ll still have access to: water, food, health & first aid, heat, power, and communications.

Let me conclude with the “spiritually uplifting” part this presentation. There is a rice farmer in Japan who pays particularly close attention to these issues.

BEGIN QUOTE FROM FARMER

Preparing should be rewarding and fun. By "rewarding," I don't just mean that you'll survive, but that the very activity will make your life richer (it's the process, not just the goal). Brainstorming, gardening, learning a skill, admiring the fruits of your labor, and making other preparations with your community members should be something you look forward to, not dread. Sure, there's going to be a lot of hard work, but you should feel as though you've reached the summit of today's climb, and be charged with exhilaration. Life is to be enjoyed. If there's no enjoyment, then we're nothing more than robots.

END QUOTE FROM FARMER

There is currently an Adult R.E. class led by myself and Webb Van Winkle exploring these issues in depth. Session 3 of 5 will be Monday night in the Jr. High room at 7 P.M. It's not too late to join us – it will be fairly easy to catch up by watching the video material we've covered so far. If you can't make the Adult R.E. class, please let me know if you have an interest in "buying some insurance" by joining a group of us to brainstorm what we can do to mitigate the risk of storms to come.