The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

Peak Oil and Community Solutions Conference (Saturday)

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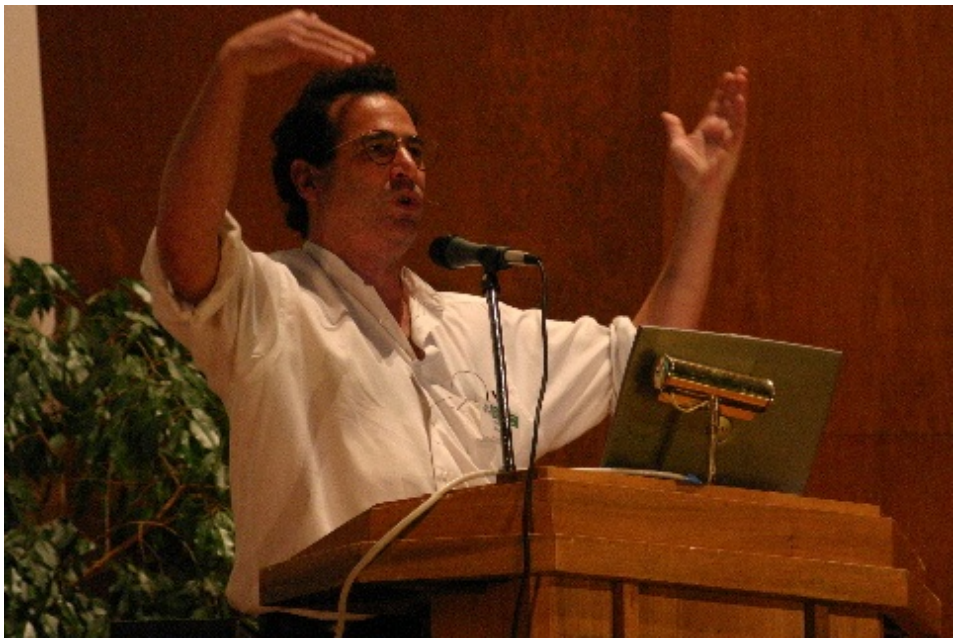

Michael Shuman, author of *Going Local*, emphasizes a point during his Saturday night keynote address. Report below the fold.

Technorati Tags: peak oil, oil, gas prices

Note that this report was written late Saturday night, and I did not edit the substance in light of the excellent discussion on Friday's report, so one or two points might seem done to death at this stage. I wanted to preserve my reactions as I had them at the time.

Steve Andrews listens to a question.

First up Saturday morning was Steve Andrews, a longtime green-builder, sustainability expert, and peak-oil worrier. He's a founder of the new ASPO-USA, and is helping to organize their first conference (November 10th-11th in Denver). Andrews is a clear, likeable, and witty speaker, who gave an overview of alternatives to oil. Essentially, it was the conventional peak-oil wisdom; yes alternatives help, but no we can't ramp them up fast enough to make a dramatic difference and we are still going to have to make enormous changes. He sees oil sands and biofuels as the nearest term help, and oil shale only making a very small contribution by 2015.

The most interesting part of his talk to me was a little bit more detailed discussion of Shell's recent in-situ pilot for shale oil (he lives in Colorado and has talked to the Shell folks). According to Andrews, the method involves drilling wells 30 feet on center (!) through 1000 feet of overburden into 1000 feet of payzone shale. They'll be heating the wells in the middle of some largish area, but creating a freezewall around the edge (using liquid ammonia piped down a wall of wells). The latter is to prevent ground water infiltration which would both ruin their energetics (because they'd be heating up groundwater which would then leach away heat), and also cause contamination. Shell is apparently expecting to take six years to get permitted for a larger project, and then another six years to carry it out. Definitely the fuel of the future.

John Ikerd in full pulpit-pounding mode.

Next came John Ikerd. Ikerd is a retired agricultural economist. The first half of his career he was a mainstream professional doing projections of hog prices etc. In the second half, he began to get the sustainability bug and he's increasingly worked on sustainable agriculture since. He's from Southern Missouri, and gave a tent-revival, rabble-rousing speech, interrupted by frequent bursts of applause and followed by a wild, clapping, cheering, foot-stomping standing ovation. It wasn't your typical economics presentation.

His speech bugged me, but obviously I was not a typical member of the audience and you should find a way to see him for yourself and make your own mind up. Based solely on audience reaction, he's definitely the strongest contender for man-of-the-conference so far.

Ikerd's thesis in a nutshell is that the industrial revolution was a mistake, and we need to go back to where we went off course and start over. Our culture is focussed entirely on short-term greed and profit. We use up non-renewable resources as fast as possible, and degrade renewable resources as fast as possible, with no thought for the welfare of our descendants. If we always evaluate projects by their return on investment (ROI), then we inevitably will take decisions that are much better for us than our descendants. Not only that, our own sense of community and human relationships is degraded by all the competition and materialism, and really we would be happier if we didn't have all this stuff that we appear to want when offered it. Neoclassical economics is in a state of sin for justifying and apologizing for all this: the early economists, Adam Smith and David Ricardo, were very conscious of the limitations of economics and the importance of values other than just material ones. But the neo-classical economists lost this perspective and have elevated greed and materialism to a central place in the discipline and in the larger culture. Instead of all this, we need to build a culture that is sustainable - where we respect the planet and its resources as sacred and all decision-making is focussed on ensuring that we are doing things that will last for the long haul.

Furthermore, we should, as a response to peak oil, find a way to quickly stop using all fossil fuels and other non-renewable fuels such as nuclear, and get back to an entirely biomass+renewables economy.

In a way, his speech was very helpful to me as he crystallized and personified a particular strand

of the peak-oil movement that I cannot get behind (at least not at present). The problem I have is this. Firstly, while I agree with some of his critique of the lack of sustainability of industrial civilization, I think it's important not to throw the baby out with the bathwater. Many of the most incredible intellectual achievements of the human race have been critically enabled by the industrial revolution. Whether it's going to the moon, developing the theory of quantum mechanics, building computers, etc, etc -- everyone will have their favorite list -- these are profound achievements and we would be less as a species had we stayed a society of mostly peasant farmers and not done these things.

Not only that, even if we grant Ikerd that the industrial revolution was a mistake, we did it and we are stuck with the consequences. We are not now in the situation we were in back in the seventeenth century. Most relevantly, there will very soon be **ten times as many of us.** Life was not comfortable and ample in the seventeenth century. It was cramped and societies (at least in Europe and Asia) were running out of all kinds of natural resources - there were famines, and a number of countries were increasingly short of timber (which is why they resorted to coal shortly after).

So if we go back to a seventeenth century level of energy use, it's very unclear, at least to me, that we can feed anything like the current level of human population. I think somebody, especially an agricultural economist, advocating that course of action has a responsibility to have some scheme for how that is possible. I got the chance to ask Ikerd the question and it was abundantly clear that he hasn't thought carefully about it - indeed he suggested that it would be impossible to really project. It sounds wonderful to spout general principles of sustainability, but if the hidden subtext of what one is advocating is a 90% die-off, how morally uplifting is that? I want people who are advocating a return to seventeenth century levels of energy use to put together quantitative studies of amounts of arable land, crop yields etc, that give some reasonable confidence that this would work. What do we know now, that our ancestors didn't know 250 years ago, that will allow the same amount of land to support ten times as many people with no more energy input?

Now, if post-peak depletion rates are high enough, maybe it will all turn out to be hopeless anyway. But I think we should make a damn good attempt before we just assume that.

Pat Murphy responds to a question.

Next up was Pat Murphy, the executive director of Community Solutions (the conference hosts) who gave a presentation on "Armageddon or Eden?". He gave a left-leaning review of the history of European colonialism, and subsequent more subtle domination of the planet by American and European interests, covered the various nationalist and revolutionary responses to that, and suggested that one possible outcome of the peak oil situation was nuclear conflict between the US and China, Islamic countries, or others. Alternatively, he argued that humanity has the option to powerdown gracefully into a sustainable world where we'll all be much happier.

Jan Lundberg looking much too happy for a man who believes civilization is about to collapse.

Following Pat was Jan Lundberg, of Alliance for a Paving Moratorium fame. Jan holds an extreme peak-oil position which he refers to as petro-collapse. The idea as he espoused it today is that, the first time there is a significant oil-shock post peak, people will begin to fill their normally half-full tanks and otherwise hoard gas. This will cause widespread unavailability of fuel and lead to failure of food deliveries, panic, loss of law-and-order, and immediate total collapse of civilization. As he put it "the next oil shock will be the last".

This early stages of this thesis have some support - for example the British experience of 2000, and problems with hoarding in the 70s oil shocks. However, society managed to cope with those experiences despite some unpleasantness, and I see nothing about peak oil that would fundamentally change that.

Much more interesting was a short documentary he spent part of his time showing on the effects of plastic in the oceans. Plastics break down into particles of all size, but never degrade away altogether as the molecules are too large and unfamiliar for any bacteria. It is alleged that all the plastic ever produced is still around on the planet somewhere. The researcher in the documentary was studying the ratio of plastic particles to krill in the open ocean (specifically an area called the Pacific Gyre). There is six times as much plastic as krill by weight, and the amount of plastic is up about 300% since 1990. Now, the open ocean is notoriously a biological desert as there are hardly any nutrients. However, I still found these numbers staggering...

Cuba discussion panel. Left to Right: Pat Murphy, Megan Quinn, Faith Morgan, and Richard Heinberg.

Next came a video put together (but not quite finished) by Faith Morgan on the results of two trips to Cuba to explore the experience following that country's 50% oil shock after the collapse of the Soviet Union. Many people think this is an interesting laboratory for peak oil - what happens to a somewhat developed industrial-agricultural economy following major oil supply loss. The story in the video, which is fairly compelling, is that the Cubans suffered massive hardship, but came through it. They made a top down decision to completely switch from a Soviet-style collectivized industrial agriculture to small-scale organic production (in many cases giving farmers long-term individualized land tenure for the first time), and made widespread use of urban gardens. They imported millions of bikes from China, and used extensive bus runs to get people around. During the "special period", they lost 30lb on average! But very few people died and the regime survived. Their diet has improved enormously as they eat much more fresh produce now. The experience contrasts sharply with that of North Korea which faced a similar problem, didn't adapt, and ended up with massive starvation.

One of the points that was particularly interesting in the video is that it seems the Cubans had written contingency plans for major oil supply loss, in case of a US blockade of the island. One of the speakers asserted that this was critical to their success - they only had time to carry out one plan, and if they'd been making it up as they went, they probably wouldn't have made it.

It's a cool video, and presents a very positive image of Cuba which I was a little suspicious of - it is, after all, a dictatorship with a bunch of its dissidents in jail for criticising the regime. I like this more cynical Harper's piece. However, the enthusiasm of the various Cuban speakers for their country and what they had achieved despite bloody-minded US obstructionism was obviously genuine and heartfelt, so there must be some good things about the place (at an absolute minimum, they are vastly better at evacuating their citizens out of the path of hurricanes than the US is)

The panel led a fascinating discussion of the extent to which the Cuban experience would be, or could be, replicated in the US if we faced a similar situation, and whether the US post peak would be similar.

Michael Shuman in action again.

Finally, we have Michael Shuman, author of *Going Local*. Shuman is an economic development expert who advises his local government clients how to improve their economies. He's a wonderfully polished speaker, and one of those expressive New Yorkers who talks with their hands. I spent too much time trying to photograph him in full flow of wonderful gesture (in a low-lit room, with ceiling too high for my bounce flash, with resulting long exposures), and not enough time listening to him. But the gist of his argument is that in a post-peak world, economics will get more local of necessity. This is a good thing in his view as local economies are more robust - it's very dangerous to have your economy dependent on one or two big exporting corporations which can always pull up stakes and leave you in the lurch.

He articulated at length how it is much more cost effective to pursue economic development by promoting small local businesses that will substitute for imports to the local economy, rather than trying to woo large outside businesses that will become exporters from the local economy. The main reason is that those big export businesses have become incredibly good at playing communities off against each other and drive outrageously hard bargains. I was persuaded by his case, and here's another picture for good measure.

After that, we went to the party where we had pie from a local baker and an impromptu band of Jan Lundberg, Richard Heinberg, and an economist lady (who's name I didn't catch) played music. But your trusty correspondent considered himself off-duty and didn't take his camera, so you'll just have to imagine it.