

An Alternative Energy News Source Interview with Peter Tertzakian
Interviewed by Russell Hasan
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Peter Tertzakian is the author of “A Thousand Barrels A Second,” an insightful, penetrating analysis of the history of energy and the pending oil crisis. He is an expert in the field of oil analysis and is the chief energy economist of ARC Financial Corporation. We spoke with Mr. Tertzakian about oil prices, renewable energy, and the future of global oil demand.

AENS: When do you think that the Hubbert Peak, (the point at which oil production will begin a steady and permanent decline) will happen, and why do you think it will happen then?

PT: You have to be careful about what that applies to. If you are talking about light sweet crude oil, it is close, maybe five years from now, or now. If you are talking about oil in general, you have to remember that there are many grades, many types of oil, and Hubbert's Peak may be far away. Society doesn't consume oil, it consumes fuel, which can be made from many different things, such as biofuel. Hubbert's Peak is interesting for talking about light sweet crude, but for broader oil it is less relevant. As it becomes more difficult to make light sweet crude, prices will rise.

AENS: Has oil exploration and production technology improved enough for us to find major new fields?

PT: The technology has improved, like three-dimensional seismic, and it will enable us to find more. But the sites found are getting smaller and smaller, deeper and deeper, many are offshore, and we are finding more oil, but not cheaper oil, so the decline rate is getting steeper.

AENS: Where are the potential big fields?

PT: The Gulf of Mexico has potential. But where the oil can be found is not just geology, it is geography and it is geopolitical. Finding oil has become a political exercise, geopolitical intrigue blankets geology, exacerbating finding oil. Technology will play a role, but at some point it is not about technology.

AENS: What do you think oil production and consumption will be like in the next few years?

PT: Consumption will grow every year, as it has during 140 of the last 147 years. As the economy grows, consumption grows, the only question is by how much. For a healthy economy, by one and a half million barrels per day.

AENS: How high do you think the price of oil will go?

PT: Difficult to say. It depends upon geopolitics of the Middle East. If Iran goes military, it may be over \$100/barrel. If Iran stays peaceful, not so high. There are qualitative factors. It may be more useful to ask what is the floor price, the price below which it won't go, and over the next few months that may be \$60.

AENS: Why do you think that renewable energy won't be the magic bullet that will satisfy energy demand after oil?

PT: By "magic bullet" I mean something that can quickly substitute for oil on a large scale. Renewable energy is unlikely to do that in the next five to ten years. I am not saying that it can't play a role, but not in the next five to ten years. There are several reasons for this. First is scalability. Second, most renewable energy is for electrical production, not transportation, which is the real problem. Third, the huge base infrastructure of oil is difficult to displace. Fourth, demand for energy is growing, so the renewable energy that is introduced is absorbed, and is not offsetting base consumption, so demand for oil will continue to grow over the next five to ten years. Fifth, oil is difficult to beat, its utility is hard to match, most renewable energies don't have compelling utility. However, good renewable energy companies have a bright future, and there are good investment opportunities. Can renewable energy change the world energy landscape in the next five to ten years? No, not enough to change supply and demand.

AENS: Let's talk about Canadian oil sand. How high does the price of oil have to be for oil sand to be profitable?

PT: That answer requires caution. For an existing facility, the operating cost is \$15-20 per barrel. For a proposed facility, with inflation, a new oil sand facility would need \$45 per barrel or up to be economical.

AENS: What potential do the Canadian oil sands have to satisfy world oil demand, and how long will it be until Canada becomes a significant oil producer?

PT: It already is. Canada is the ninth largest producer in the world, and the largest exporter to the United States. World demand is growing, and the production of oil sand will grow by two million barrels per day over the next ten years, while demand will grow one and a half million barrels per day, so the Canadian oil sands will only satisfy fifteen months of oil demand.

AENS: What areas and companies in energy do you see as the best investment opportunities, and what companies are you investing in?

PT: Alternatives with scale and distribution potential are worth investing in. Biofuel pipelines, if they have low cost with distribution. Uranium, because of new nuclear plants being proposed. Oil and gas companies with a bias for low cost producers. Some of the oil companies have high cost. I invest in companies with low cost. Oil sand, because it is politically stable. I don't invest in solar, but solar has potential.

AENS: Do you think that enough is being done to promote renewable energy by government?

PT: It's all relative. Relative to consumption, no, you have to understand the breadth and depth of our addiction to oil, and not enough is done to ease consumption. People should be told to conserve, to drive smaller vehicles, as this is the lowest hanging fruit for easing oil demand.

AENS: Which kind of renewable energy do you think has the most potential and could become the most economically feasible for large-scale use?

PT: I have to be cautious, because I am not an expert across the spectrum. In which markets? There is no clear answer, but a lot of money is going into biofuels, so that may be best.

AENS: Which do you think has the best chance of alleviating gasoline prices: hydrogen fuel cells, hybrid cars, or ethanol?

PT: Can I answer none of the above? The answer may be hybrid, but what is really needed are lighter weight cars. Lighter cars could bring tremendous fuel economy. We don't need a high tech solution, we need to convince people to buy lighter vehicles, like a passenger car instead of an SUV or pickup truck. The fuel economy of a light car is the same as a hybrid.