The Ultimate Transition

Getting ready for the new energy framework

by Walter Youngquist

oday (March 3, 2005) oil closed above \$54 after briefly being above \$55. What we are seeing now are the basic geological limits to world oil production beginning to appear.

Recently the Saudi Oil Minister, when asked about the price of oil above \$50, said that "the fundamentals justify the price," and "get used to it." Cheap oil is history.

In the meantime population growth booms along, especially in the United States where, for all practical purposes, we have no borders. The lack of concern for this on the part of the Bush Administration worries and irritates me considerably. More and more we are living on "imported affluence" and our import trade deficit is now more than \$600 billion – and growing.

With immigration accounting for 80 percent or more of our population growth, this should be of prime concern but in governing circles there is endorsement for even more immigration. When asked, Federal Reserve Chairman Greenspan recently said he favors immigration and thought it a net positive.

This is the century when the world makes the ultimate transition from the fossil fuel happy bubble to a renewable energy resource economy. It is probably going to be the most significant event in human history to date – an event that establishes the energy framework that the human race will have to live with – *from now on – permanently*. I do not see how renewable sources of

Walter Youngquist, Ph.D., is a consulting geologist who has studied the relationship between Earth's resources and its population in over seventy countries. A Fellow of the Geological Society of America and the American Association for the Advancement of Science, as well as author of GeoDestinies, he makes his home near Eugene, Oregon.

energy can begin to support even the 6.3 billion people we have now, much less the 9 billion or so we will have by 2050 when the transition will be far along.

In our 1999 paper, Richard Duncan and I predicted that world oil production will decline by 62% by 2040 – and that is only 35 years away. I don't think the general public has any idea how serious is the impact of what is about to befall them. There will be basic questions: Can law and order be maintained, or will we see increasing chaos? Already it seems to me that in the United States, with its huge and growing population, life is becoming cheaper, and law and order are beginning to break down under the pressures of numbers.

Beyond oil, population growth is the world's number one problem. Civilization existed before the advent of oil, and it will survive after oil, but how well it will survive is basically the question of population size against fixed resources. The world will know the answer *in this century*.

