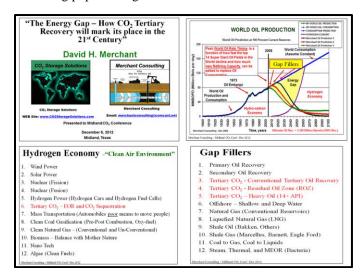
Merchant Consulting – "The Energy Gap – How CO₂ Tertiary Recovery will mark its place in the 21st Century"

Presented at the Midland CO₂ Conference December 6, 2012 Midland, Texas

The Energy Gap:

As shown on the chart below, the Economic Sustainability of the 21st Century is based largely on how well Mankind can best fill its World Oil Consumption needs. Back in 2005, the World was consuming around 80 million barrels of oil a day. Today, that number has risen to 86.8 million barrels a day. Based on straight line projections, the World would require between 160 million barrels a day and 200 million barrels a day in the year 2100 to support an ever increasing population growth.



In 2005, the World thought we were running out of oil. What we learned is that Peak Oil is a function of how fast we can keep up with technology to help "Fill" the "Energy Gap" that exists between Consumption and Energy Supply.

For the World to maintain Economic Sustainability in the 21^{st} Century and lower our CO_2 impact on the Planet, we must at some point transition ourselves between a Hydro-Carbon Based Economy to a Hydrogen Based Economy without sacrificing all of what we have accomplished as a society to date. The Hydrogen Economy currently contains Wind, Solar, and Nuclear (Fission) that by themselves will add to the curve, but will still be small in comparison to our total energy needs. In addition, Hydrogen Power along with Nuclear (Fusion) are only in their infant stages of development and will not see any impact until the technology can compete economically with conventional sources of power.

To achieve Economic Sustainability requires filling the total area under the curve all the way through the 21st century. "Gap Fillers" such as Conventional Oil Recovery (Primary, Secondary, and Tertiary) along with Unconventional Methods (Shale Oil and Shale Gas) will help fill our energy needs in the 21st Century.

The question becomes "Is Man civilized enough to "Fill the Gap" and maintain "Economic Sustainability", or will Civilization decline?" Only time will tell.

The complete presentation behind "The Energy Gap – How CO₂ Recovery will mark its place in the 21st Century" was presented at Midland's CO₂ Conference in 2012. Copies of it along with other presentations and papers can be DOWNLOADED from one of Merchant Consulting's WEB Sites: