

The Importance of Oil and Natural Gas

by
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When they hear of the decline of oil and natural gas, the first inclination of many people is to say, "Oh well. So I won't be able to drive as much. I'll just have to buy a hybrid car and a wood stove." It is difficult to appreciate the true importance of hydrocarbons to modern civilization. It is doubtful that there is any facet of our technological civilization which will not be affected by the diminishing production of oil and natural gas.

If you are reading this article in the morning paper, then the paper it is printed on was manufactured using the energy of oil or natural gas, while the ink itself is an oil product. The printing press which printed this newspaper was built using the power of oil and natural gas, and runs on energy provided by oil and gas. Unless the paper was delivered by a paperboy riding a bicycle (built using the energy of oil and gas, and riding on tires made of oil), then it was delivered by a motor vehicle which consumed oil, was built with the energy of oil and gas, incorporating plastic parts made from oil, and driven on roads made from oil. "Ha, ha!" you say, "I've got you there. I am reading this on the internet." In which case, the computer you are reading this on is largely made of oil-based synthetics, and is probably running on electricity generated by natural gas.

The light you are reading by was probably produced from electricity generated by natural gas. If not, then it was generated by coal or nuclear fuel, both of which are mined and transported using oil. The chair you are sitting on was built using the energy of oil and natural gas, and if it is built with any materials other than wood (cut and transported using oil and gas) or metal (mined, smelted and transported using oil and gas), then they are probably artificial materials made from oil. The same goes for the clothes you are wearing.

The coffee you are sipping as you read this column was transported and processed using the energy of oil. Likewise the bacon and eggs you had for breakfast. And the grain which went into the toast you are eating (harvested, ground, baked and transported using the energy of oil and gas), was grown using fertilizers produced from natural gas and pesticides produced from oil. The plate you are eating on was either made from oil, or baked in a kiln using natural gas. And your breakfast was cooked on a stove which used either natural gas, or electricity generated from natural gas.

Beyond that, the materials used to build the house you are sitting in were transported using oil, as was every item in your house. Oil powered vehicles transport all raw materials to the factory, all finished products from the factory to the marketplace, and all purchases from the marketplace to your home. It is mainly due to the availability of cheap and plentiful oil that the average consumer in the U.S. today can live like a king or queen.

The average U.S. citizen today is benefiting from the energy equivalent of 60 slaves working around the clock. We take our energy slaves totally for granted. A large portion of them are used on frivolous consumption. And, if we are denied our energy slaves for even a few hours, then most of us will kick up a big fuss until they are restored to us.

Our civilization is built on oil, and an ever expanding supply of energy is vital to continued economic growth. To quote the Energy Information Administration, Department of Commerce and Bureau of Economic Analysis, "The availability of oil, natural gas, and coal is what made the United States' rise to a global economic superpower possible. As energy consumption escalated, so did the nation's economic output as measured by annual gross domestic product."

The converse of this last sentence is also true. As energy consumption declines, so will the annual gross domestic product. It is suspected that this decline will be precipitous rather than gradual. Once investors understand that diminishing energy production cannot be reversed, the market will collapse. The result could be a depression worse than the Great Depression of the 1930s; a depression with no end in sight.

To see where we may be heading, it is only necessary to look back at the 1970s. In the year 1970, U.S. domestic oil production peaked and began to decline. This country has never again produced so much oil as we did in 1970. The result was spiraling inflation and gasoline rationing. Due to inflation, mortgage rates jumped 21%. There were trucker strikes, the Arab oil embargo, and a host of other difficulties. But we were able to overcome the peak of domestic oil production because the world as a whole had not peaked. We had someplace else where we could turn. By the early 1980s, Alaska's North Slope oil was brought on line, as was Gulf of Mexico oil production and, more importantly, the North Sea deposits. Although the North Slope and Gulf of Mexico deposits were not big enough to change the peak of U.S. oil production, along with the North Sea oil they gave us enough leverage to break the back of OPEC for the time being.

But today the North Slope and North Sea fields are all past peak, as are most of the major oil fields in the world. The vast majority of the remaining oil deposits are found in the Middle East, in the countries of Saudi Arabia, Iraq and Iran. Outside of this area, there are important deposits in Russia, West Africa and Venezuela, but these deposits are an order of magnitude smaller than the Middle East. And there are indications that Saudi Arabia's Ghawar oil field—the largest single field in the world—has been overproduced and abused to the point of collapse.

This is why many experts speculate that the end of cheap oil could bring about the end of civilization as we know it. After this will come an era of diminishing energy supplies, diminishing economies, and the faltering ability to even feed the number of people who live in the U.S. today, much less the entire planet.