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OIL OUR LIFEBLOOD

TODAY AND TOMORROW

There has **never** been a greater focus than now on oil production, cost, reserves, demand and exploration. Peak attention is also on the effort to replace oil as a prime energy source with alternative means. For generations we have been told that the world's oil reserves would be exhausted in the not too distant future. Somehow, however, that critical time keeps getting pushed ahead. What is our true dependency on oil and when will it end?

Dividing our global energy resources into **nonrenewable** and **renewable** groups gives us a better understanding of their availability and relative importance. Nonrenewable energy resources include oil, natural gas, coal and nuclear energy. There is no replenishment of these energy modes taking millions of years to form. Renewable energy sources include hydropower, solar energy, wind, geothermal and biomass (plant materials and animal wastes used as fuel).

What do we find when we sit back objectively and realistically assess the overall energy situation, putting it into perspective? Oil (petroleum) fills an estimated **40%** of the world's primary energy needs. (1). It is the cornerstone of our energy resources, supplying industrial, commercial, residential and governmental (military) needs.

Most important of all, **oil provides the power for most of the world's vehicles**. J.D. Power and Associates estimates that there are currently 835 million vehicles on the world's roads and that this will increase to 1.1 billion within fifteen years. According to the U.S. Department of Energy this growth will increase global oil consumption by 57% during this span. (2).

There is an estimated world total of four trillion barrels of oil, half being recoverable. More than 465 billion barrels have already been consumed. (1). At the current 22 billion barrels annual rate of consumption and factoring in increasing usage against more efficient means of recovery as offsets, we have approximately 45 years supply left from conventional oil reserves. **Improved fuel efficiency could add as much as four decades or double the world's use of oil from current conventional sources.** (3). This

will also decrease the widespread pervasive impact high oil prices have on the general economy and individual consumers. It would be a worthwhile legacy for our children, grandchildren and great grandchildren. **Widespread use of Fuel Fx Diesel and gasoline Reactors will help make this goal achievable through significantly increasing fuel efficiency.**

As better recovery technologies are developed, more oil will also be extracted, although at greater expense, from the huge oil reserves in shale deposits and tar sands. With the enormous global dependency on oil for vehicular operation (autos, trucks, planes, locomotives, construction equipment and ships) and with alternative energy sources phasing in slowly because of their deficiencies and cost, **it is likely that oil, although expensive, will continue to be our mainstay for more than the next four generations, that is, into the next century!**

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