

## THE FUTURE WITHOUT OIL

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**ABSTRACT:** *When did oil start to be a part of civilization and how did the use of oil grow over the years? How does oil support modern production and increase production of food, clothes and houses? And what is Peak Oil? The world should prepare for the future without oil.*

**KEYWORDS:** peak oil, future, barrel, oil production, fossil fuels, energy crisis

## INTRODUCTION

“Oil is Power!” What makes oil so intensively popular and powerful?

Oil is universal and up to now there is no responsible alternative for that. Oil and its products are easy to burn with high-energy content, widely available and can be easily transported from one country to another.

The story of barrel comes from the first days of production in Pennsylvania. At that time there was no standard oil container. The oil companies used everything they got, for example the 40-gallon Whiskey container. By 1872 became 42-gallon barrel standard.

One barrel of oil contains about 6.119 billion joules or 1,462,535.2 kilocalories. Depending on the activity we use about 100-700 kcal/h. Using this range for our calculation results in a range about 2.078 into 14.544 hours per barrel.

Global energy consumption has about doubled in the last three decades of the twentieth century. Coal accounted for 55% of the entire world's energy use at 1900, while oil and gas contributed about 3%. Hundred years later, coal made 25% of the energy; gas has risen to 23% and oil rose at just under 40%. The first shift in using energy occurred early in the 18th century, because of invention of the steam power. The industrial revolution allowed to the humankind for the first time to extract truly immense energy from fossil fuels. The last two centuries induced a complete lifestyle and quality change of humankind because of very fast technological and economic growth with exponential rise in consumption and production.

The Modern life style of industrial countries asks for an intensive amount of energy consumption. The main energy resources are limited fossil fuels. At this time there has been growing concern that we have already reached the maximum oil production. Peak Oil is the point in time when the maximum rate of crude oil extraction is reached, after which the rate of extraction is expected to begin to decline. The cause of reaching this point is not important, whether geological or economics. The important point is that the peak is the peak regardless of the cause.

Clearly, in this century the overall population will grow from 6 to 11 billion people. With demographic and social economic changes will continue the raw material (fossil fuel) extraction and energy consumption. Western consumer lifestyle would continue to produce and use energy. The culture of intensive energy consumption reveals with delay in developing countries that make about fifty per cent of the world inhabitants in the future.

The determination of energy supply in the future and its possible scenarios are uncertain and strongly depend on the geopolitical and economical road map that the oil producing countries, industrial countries and developing countries will be able to give them.

Natural fossil fuels are not scarce for the recent century. However, their uneven geographical distribution is a great factor to determine the future geopolitical situation.

This situation would bring the whole world in an uncomfortable energy crisis; the political and economic relations escalate over access to resources.

In an unstable geopolitical situation like we are recently approaching that will require growing awareness, anticipated and farsighted scholars and politicians of the entire world. Investigation and investment in sustainable and renewable natural energy must get the priority of all institutions. Using basic and applied scientific researches must be established over the whole world to rethink the energy production instead of focusing of extraction of conventional resources.

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