# World Petroleum Availability 1980-2000

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A TECHNICAL MEMORANDUM

OCTOBER 1980



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# **PREFACE**

The dependence by a large portion of the world on imported petroleum makes knowledge about the future availability of petroleum on the world market of great importance. This is particularly important for the United States and other developed countries, because of the large volume of oil they import. Most of the energy decisions faced by the United States in the next two decades depend critically on the oil import issue. The level of conservation we pursue, the rate at which we develop synthetic fuels, the resolution of the nuclear power debate, as well as other energy issues all depend on the availability, and consequent cost, of imported oil. Recent events in the Middle East illustrate that the availability of foreign oil is far more precarious than the physical resource base alone might suggest.

In response to a Senate Foreign Relations Committee request for a review of global energy trends, OTA undertook this study, which estimates plausible levels of world oil production to the year 2000 and assesses the factors likely to determine which levels are actually reached. To determine that potential range of production, the study critically examines country-by-country capabilities for oil production, various estimates of what each country will actually produce, and prospects for new discoveries. Several world petroleum experts have reviewed the results of OTA's analysis.

This analysis indicates it is highly likely that there will be little or no increase in world oil production from conventional sources over current levels. Therefore, we will most likely not be able to increase the imports above our current level and, indeed, we will probably face intense competition before the close of this century at even lower levels. It would be prudent to consider this likelihood in U.S. policy actions designed to reduce our heavy dependence on petroleum.

This technical memorandum is intended to assist Congress in the debate over these and related foreign policy issues by discussing the amount of oil available and the factors that control it. This study will also serve as background for two other ongoing OTA studies on technology and Soviet energy availability and alternative energy futures.

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