

tion of indigenous high-cost coal in preference to purchasing low-cost American coal—in fact, England maintains a total embargo on American coal.

England's financial troubles can be traced, in part, to the fact that England became an energy-dependent country when it turned to large quantities of foreign oil. After sacrificing substantial percentages of its "energy bill" to foreign countries, England found its balance-of-trade problems so severe that it was forced to devalue its currency. The United States can follow the same route unless Congress limits the total share of our Nation's energy which we will permit to be furnished by foreign sources.

The total "energy bill" of the United States is large; in the future it will be much greater.

The "energy bill" of the United States is such an extremely large dollar total that it must be treated as an item separate and apart from other items of trade—or else there will be no possibility of maintaining any semblance of a balance of payments.

In 1967, exports of energy from and imports to the United States had the following dollar values:

[In millions of dollars]

	Export value	Import value
Coal, coke, etc.....	501	4
Petroleum and petroleum products.....	539	2,100
Natural gas.....	64	129
Electric energy (1966).....	3	8
Total.....	1,007	2,241

It will be noted that, in spite of coal's half a billion dollar contribution to our balance of trade, this country in 1967 suffered a deficit of \$1,234,000,000 in its foreign trade account insofar as energy is concerned. Worse yet, this deficit in energy trade is increasing. Without effective Congressional regulation, it may increase in future years to such a volume that it could destroy our nation's ability to maintain the position of the dollar in world trade.

Every nation with a decent standard of living has a high energy bill. The United States has a tremendous per-capita rate of energy consumption. In 1967 the value of coal produced in the United States, at the mine, was \$2,600,000,000. The value of crude oil at the well was \$8,900,000,000. The value of natural gas at the well was \$2,900,000,000. Adding the trade deficit for energy (\$1,234,000,000), we find the nation's total bill for raw energy in 1967 was \$15,634,000,000.

This is just the beginning. There are available many different estimates of the future growth of energy consumption in the United States. All of those estimates agree that energy consumption will increase tremendously, reaching by the end of the century three to four times as much as the current figure.

If in 20 years our energy consumption merely doubles, our nation's total bill for raw energy will be more than 30 billion dollars, even at present prices. If we were to permit any large percentage of this to be served by foreign sources, we would have an energy deficit so great that it would be impossible for the country to balance its total trade.

If industry is given definite, long-term assurance of a stable share of the total energy bill, the U.S. will never become a "have-not" nation with respect to energy.

Secretary of the Interior Stewart L. Udall, testifying before this Committee on June 4, 1968, pointed out that "in the case of oil, our security would be jeopardized unless we have a strong, healthy, domestic oil industry, capable of meeting any demand. *Adequate domestic supplies depend upon exploration and discoveries and these activities will not be carried on in the absence of an adequate market for domestic production.*" (Emphasis added.)

It is possible, even probable in the face of greatly expanded demands for energy in the future, that at some time domestic oil and gas will not be available at any cost. When that time is reached, the United States will still have indigenous energy available because it is blessed with abundant reserves of coal and oil shale. Unfortunately, however, it appears now (in the absence of some technological breakthroughs not now foreseen) that synthetic fuels from these sources will not be able to compete with the extremely low-cost oil and gas