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## ENERGY R&D PROGRAMS BOOSTED IN 1975 BUDGET

- Energy represents the most rapidly growing area of Federal R&D funding at the present time. A total of \$1.8 billion<sup>1</sup> has been allotted in the President's 1975 budget to energy R&D programs which include in their purposes the further development of energy resources, an increase in the efficiency of energy use, or an abatement of polluting effects of fuel production and combustion. These programs range from those primarily focused on energy problems to those focused on *energy-related* problems and include programs for R&D plant construction as well.
- Obligations for energy R&D programs amount to 8.8 percent of all Federal R&D obligations in 1975 compared with a 5.3-percent share in 1974.
- Of the approximately 10-percent growth in Federal R&D funding (R&D plant included) in 1975, almost one-half is made up of increases for energy programs.
- The entire energy R&D effort can be divided into broad program areas, of which the largest is nuclear fission, 39.9 percent of the total in 1975. Next largest area is that of coal, 22.9 percent. Third in emphasis is environmental control, 9.8 percent, and fourth is nuclear fusion, with a 9.3-percent share. Conservation, an emerging area, will claim 7.1 percent. Solar energy research will represent 2.8 percent, and geothermal research 2.5 percent.
- Four agencies account for 97 percent of the support in 1975. They are the Atomic Energy Commission, the Department of the Interior, the Environmental Protection Agency, and the

National Science Foundation. AEC will sponsor slightly more than one-half of the total energy R&D work and Interior, almost one-third.

- Between 1969 and 1975 the total of those R&D programs that are primarily devoted to energy problems has risen from \$328 million to an estimated \$942 million (R&D plant excluded).<sup>2</sup> This category excludes those R&D programs whose primary purpose might be environmental control or natural resources management, for example, but which would have an energy purpose as well.
- The rise for these "primary" programs between 1974 and 1975, is \$366 million, or 64 percent. About one-fourth of this increase is directed to work on nuclear reactors, another

<sup>2</sup> Preliminary data.

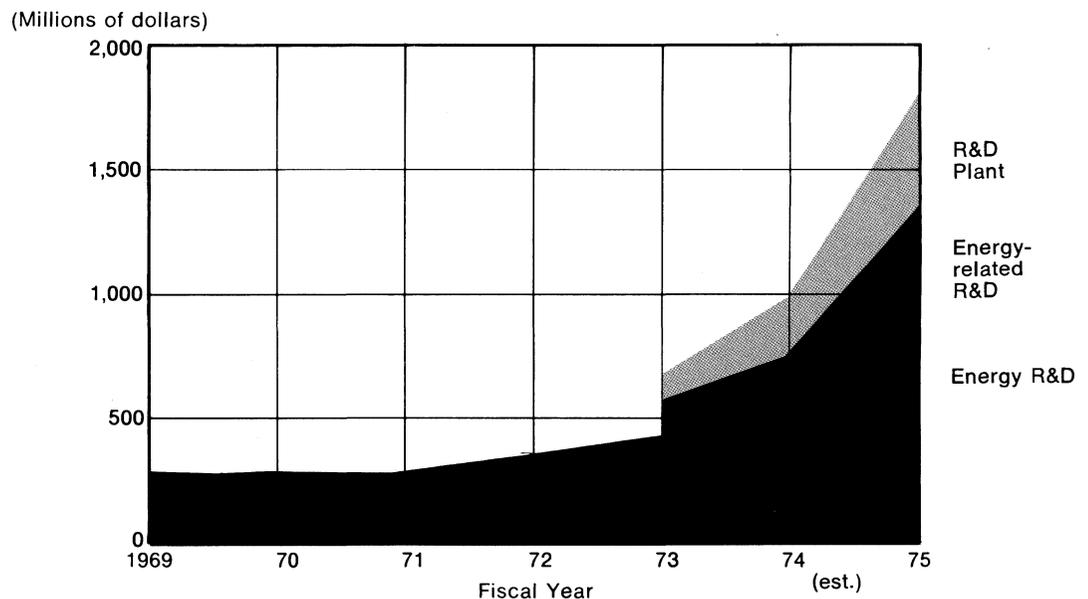
one-fourth to R&D programs in coal, and the rest to solar, geothermal, and controlled thermonuclear fusion research, energy conservation, mined area protection, and oil, gas, and shale R&D programs.

- The \$1.8 billion budget figure also covers a number of energy-related programs. These include environmental control programs, mining health and safety research, systems studies, and investigations in connection with geothermal leasing.
- R&D plant is also part of the overall total, and among the major increases for 1975 are those for pilot plant operations in coal processing and nuclear reactors, including the liquid metal fast breeder reactor. An increase for facilities for carrying out

controlled thermonuclear research is covered as well.

- A shift has occurred since 1969 in the proportion of the primary energy R&D effort devoted to nuclear areas. In 1969 more than 87 percent of the funds were assigned to nuclear energy programs whereas in the 1975 budget only 62 percent are so directed. When taken as a share of the broader 1975 energy R&D total, the nuclear effort is 49 percent.
- The record shows that the Federal Government is increasingly marshaling the resources of science to help solve a wide range of our energy problems. It also shows that the demands of the energy crisis have played an important part in the sizable 1975 increase in overall Federal R&D funding.

Federal Energy R&D Funding Levels,<sup>1</sup> FY 1969-75



<sup>1</sup> This figure is not derived from a function system with a number of object categories additive to 100 percent. In such a system only R&D programs whose primary purpose is energy-involved would be placed under the energy heading and the total for energy would, thus, be smaller. See: National Science Foundation, *An Analysis of Federal R&D Funding by Function, Fiscal Years 1969-74*, Washington, D. C., 1974.