

(b) The program referred to in subsection (a) shall include the use of metallurgical coal—

(1) as a boiler fuel for the purpose of generating steam to produce electricity, including blending metallurgical coal with other coals in order to enhance its efficient application as a boiler fuel;

(2) as an ingredient in the manufacturing of steel; and

(3) as a source of pipeline quality coalbed methane.

(Pub. L. 102-486, title XIII, § 1307, Oct. 24, 1992, 106 Stat. 2975.)

#### § 13338. Utilization of coal wastes

##### (a) Coal waste utilization program

The Secretary, in consultation with the Secretary of the Interior, shall establish a research, development, demonstration, and commercial application program on coal waste utilization for the purpose of developing techniques that will lead to the greater and more efficient utilization of coal wastes from mining and processing, other than coal ash.

##### (b) Use as boiler fuel

The program referred to in subsection (a) shall include projects to facilitate the use of coal wastes from mining and processing as a boiler fuel for the purpose of generating steam to produce electricity.

(Pub. L. 102-486, title XIII, § 1308, Oct. 24, 1992, 106 Stat. 2975.)

#### § 13339. Underground coal gasification

##### (a) Program

The Secretary shall conduct a research, development, demonstration, and commercial application program for underground coal gasification technology for in-situ conversion of coal to a cleaner burning, easily transportable gaseous fuel. The goal and objective of this program shall be to accelerate the development and commercialization of underground coal gasification. In carrying out this program, the Secretary shall give equal consideration to all ranks of coal.

##### (b) Demonstration projects

As part of the program authorized in subsection (a), the Secretary may solicit proposals for underground coal gasification technology projects to fulfill the goal and objective of subsection (a).

(Pub. L. 102-486, title XIII, § 1309, Oct. 24, 1992, 106 Stat. 2975.)

#### § 13340. Low-rank coal research and development

The Secretary shall pursue a program of research and development with respect to the technologies needed to expand the use of low-rank coals which take into account the unique properties of lignites and sub-bituminous coals, including, but not limited to, the following areas—

(1) high value-added carbon products;

(2) fuel cell applications;

(3) emissions control and combustion efficiencies;

(4) coal water fuels and underground coal gasification;

(5) distillates; and

(6) any other technologies which will assist in the development of niche markets for lignites and sub-bituminous coals.

(Pub. L. 102-486, title XIII, § 1310, Oct. 24, 1992, 106 Stat. 2975.)

#### § 13341. Magnetohydrodynamics

##### (a) Program

The Secretary shall carry out a research, development, demonstration, and commercial application program in magnetohydrodynamics. The purpose of this program shall be to determine the adequacy of the engineering and design information completed to date under Department of Energy contracts related to magnetohydrodynamics retrofit systems and to determine whether any further Federal investment in this technology is warranted.

##### (b) Solicitation of proposals

In order to carry out the program authorized in subsection (a), the Secretary may solicit proposals from the private sector and seek to enter into an agreement with appropriate parties.

(Pub. L. 102-486, title XIII, § 1311, Oct. 24, 1992, 106 Stat. 2976.)

#### § 13342. Oil substitution through coal liquefaction

##### (a) Program direction

The Secretary shall conduct a program of research, development, demonstration, and commercial application for the purpose of developing economically and environmentally acceptable advanced technologies for oil substitution through coal liquefaction.

##### (b) Program goals

The goals of the program established under subsection (a) shall include—

(1) improved resource selection and product quality;

(2) the development of technologies to increase net yield of liquid fuel product per ton of coal;

(3) an increase in overall thermal efficiency; and

(4) a reduction in capital and operating costs through technology improvements.

##### (c) Proposals

Within 180 days after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section.

(Pub. L. 102-486, title XIII, § 1312, Oct. 24, 1992, 106 Stat. 2976.)

#### § 13343. Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this part \$278,139,000 for fiscal year 1993 and such sums as may be necessary for fiscal years 1994 through 1997.

(Pub. L. 102-486, title XIII, § 1313, Oct. 24, 1992, 106 Stat. 2976.)