

(8) to date, the national effort in research, development, and demonstration activities relating to the utilization of solar energy has been extremely limited; therefore

(9) the urgency of the Nation's critical energy shortages and the need to make clean and renewable energy alternatives commercially viable require that the Nation undertake an intensive research, development, and demonstration program with an estimated Federal investment which may reach or exceed \$1,000,000,000.

(b) The Congress declares that it is the policy of the Federal Government to—

(1) pursue a vigorous and viable program of research and resource assessment of solar energy as a major source of energy for our national needs; and

(2) provide for the development and demonstration of practicable means to employ solar energy on a commercial scale.

(Pub. L. 93-473, §2, Oct. 26, 1974, 88 Stat. 1431.)

#### SHORT TITLE

For short title of Pub. L. 93-473, which enacted this subchapter, as the "Solar Energy Research, Development, and Demonstration Act of 1974", see section 1 of Pub. L. 93-473, set out as a note under section 5501 of this title.

### § 5552. Definitions

For the purposes of this subchapter—

(1) the term "solar energy" means energy which has recently originated in the Sun, including direct and indirect solar radiation and intermediate solar energy forms such as wind, sea thermal gradients, products of photosynthetic processes, organic wastes, and others;

(2) the term "byproducts" includes, with respect to any solar energy technology or process, any solar energy products (including energy forms) other than those associated with or constituting the primary product of such technology or process;

(3) the term "insolation" means the rate at which solar energy is received at the surface of the Earth;

(4) the term "Project" means the Solar Energy Coordination and Management Project; and

(5) the term "Chairman" means the Chairman of the Project.

(Pub. L. 93-473, §3, Oct. 26, 1974, 88 Stat. 1431.)

### § 5553. Solar Energy Coordination and Management Project

#### (a) Establishment

There is hereby established the Solar Energy Coordination and Management Project.

#### (b) Membership; chairman; compensation

(1) The Project shall be composed of six members as follows:

(A) an Assistant Director of the National Science Foundation;

(B) an Assistant Secretary of Housing and Urban Development;

(C) a member of the Federal Power Commission;

(D) an Associate Administrator of the National Aeronautics and Space Administration;

(E) the General Manager of the Atomic Energy Commission; and

(F) a member to be designated by the President.

(2) The President shall designate one member of the Project to serve as Chairman of the Project.

(3) If the individual designated under paragraph (1)(F) is an officer or employee of the Federal Government, he shall receive no additional pay on account of his service as a member of the Project. If such individual is not an officer or employee of the Federal Government, he shall be entitled to receive the daily equivalent of the annual rate of basic pay in effect for level IV of the Executive Schedule (5 U.S.C. 5315) for each day (including traveltime) during which he is engaged in the actual performance of duties vested in the Project.

#### (c) Responsibilities

The Project shall have overall responsibility for the provision of effective management and coordination with respect to a national solar energy research, development, and demonstration program, including—

(1) the determination and evaluation of the resource base, including its temporal and geographic characteristics;

(2) research and development on solar energy technologies; and

(3) the demonstration of appropriate solar energy technologies.

#### (d) Cooperation with other Federal agencies; assignment of other Federal agency personnel to Project

(1) The Project shall carry out its responsibilities under this section in cooperation with the following Federal agencies:

(A) the National Science Foundation, the responsibilities of which shall include research;

(B) the National Aeronautics and Space Administration, the responsibilities of which shall include the provision of management capability and the development of technologies;

(C) the Atomic Energy Commission, the responsibilities of which shall include the development of technologies;

(D) the Department of Housing and Urban Development, the responsibilities of which shall include fostering the utilization of solar energy for the heating and cooling of buildings, pursuant to subchapter I of this chapter; and

(E) the Federal Power Commission, the responsibilities of which shall include fostering the utilization of solar energy for the generation of electricity and for the production of synthetic fuels.

(2) Upon request of the Chairman, the head of any such agency is authorized to detail or assign, on a reimbursable basis or otherwise, any of the personnel of such agency to the Project to assist it in carrying out its responsibilities under this subchapter.

#### (e) Establishment or approval of program or project; operation and administration of program or project

The Project shall have exclusive authority with respect to the establishment or approval of

programs or projects initiated under this subchapter, but the agency involved in any particular program or project shall be responsible for the operation and administration of such program or project.

**(f) Authorization of National Aeronautics and Space Administration to undertake and carry out assigned programs**

The National Aeronautics and Space Administration is authorized to undertake and carry out those programs assigned to it by the Project.

(Pub. L. 93-473, § 4, Oct. 26, 1974, 88 Stat. 1432.)

**TRANSFER OF FUNCTIONS**

Federal Power Commission terminated and its functions, personnel, property, funds, etc., transferred to Secretary of Energy (except for certain functions which were transferred to Federal Energy Regulatory Commission) by sections 7151(b), 7171(a), 7172(a), 7291, and 7293 of this title.

For transfer of functions of Federal Power Commission, with certain reservations, to chairman of such Commission, see Reorg. Plan No. 9 of 1950, §§1,2, eff. May 24, 1950, 15 F.R. 3175, 64 Stat. 1265, set out in the Appendix to Title 5, Government Organization and Employees.

Atomic Energy Commission abolished and functions transferred by sections 5814 and 5841 of this title. See also Transfer of Functions notes set out under those sections.

Functions of National Science Foundation relating to or utilized in connection with solar heating and cooling development transferred to Administrator of Energy Research and Development Administration by section 5814(f) of this title. Energy Research and Development Administration terminated and functions vested by law in Administrator thereof transferred to Secretary of Energy (unless otherwise specifically provided) by sections 7151(a) and 7293 this title.

**§ 5554. Solar energy resource determination and assessment program; objectives; implementation**

(a) The Chairman shall initiate a solar energy resource determination and assessment program with the objective of making a regional and national appraisal of all solar energy resources, including data on insolation, wind, sea thermal gradients, and potentials for photosynthetic conversion. The program shall emphasize identification of promising areas for commercial exploitation and development. The specific goals shall include—

(1) the development of better methods for predicting the availability of all solar energy resources, over long time periods and by geographic location;

(2) the development of advanced meteorological, oceanographic, and other instruments, methodology, and procedures necessary to measure the quality and quantity of all solar resources on periodic bases;

(3) the development of activities, arrangements, and procedures for the collection, evaluation, and dissemination of information and data relating to solar energy resource assessment.

(b) The Chairman, acting through the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, and other appropriate agencies, shall—

(1) develop and carry out a general plan for inventorying all forms of solar energy re-

sources associated with Federal lands and (where consistent with property rights) non-Federal lands;

(2) conduct regional surveys based upon such general plan, using innovative meteorological, oceanographic, and space-related techniques, in sufficient numbers to lead to a national inventory of solar energy resources in the United States;

(3) publish and make available maps, reports, and other documents developed from such surveys to encourage and facilitate the commercial development of solar energy resources; and

(4) make such recommendations for legislation as may appear to be necessary to establish policies for solar resources involving Federal lands and waters, consistent with known inventories of various resource types, with the state of technologies for solar energy development, and with evaluation of the environmental impacts of such development.

(Pub. L. 93-473, § 5, Oct. 26, 1974, 88 Stat. 1433.)

**§ 5555. Research and development program**

**(a) Purpose**

The Chairman shall initiate a research and development program for the purpose of resolving the major technical problems inhibiting commercial utilization of solar energy in the United States.

**(b) Implementation**

In connection with or as a part of such program, the Chairman shall—

(1) conduct, encourage, and promote scientific research and studies to develop effective and economical processes and equipment for the purpose of utilizing solar energy in an acceptable manner for beneficial uses;

(2) carry out systems, economic, social, and environmental studies to provide a basis for research, development and demonstration planning and phasing; and

(3) perform or cause to be performed technology assessments relevant to the utilization of solar energy.

**(c) Scope**

The specific solar energy technologies to be addressed or dealt with in the program shall include—

(1) direct solar heat as a source for industrial processes, including the utilization of low-level heat for process and other industrial purposes;

(2) thermal energy conversion, and other methods, for the generation of electricity and the production of chemical fuels;

(3) the conversion of cellulose and other organic materials (including wastes) to useful energy or fuels;

(4) photovoltaic and other direct conversion processes;

(5) sea thermal gradient conversion;

(6) windpower conversion;

(7) solar heating and cooling of housing and of commercial and public buildings; and

(8) energy storage.

(Pub. L. 93-473, § 6, Oct. 26, 1974, 88 Stat. 1433.)