

today and will grow increasingly attractive tomorrow as oil prices go up, elemental technologies that promote conservation and cut costs—so you save energy and money, in homes, in farms, in factories today—elemental technologies that are still not being maximized.

We just had a big announcement a couple days ago on a new light bulb that I believe will be much more attractive than the lighting systems, the conservation lighting systems that have been developed so far, and will save people millions and millions of dollars and an awful lot of energy. So we have to be sensitive to all these things if we expect to have the world we want for our children.

Last year—I am very grateful that the Congress voted for another billion dollars to research and develop clean, energy-efficient technologies, including bioenergy. In my present balanced budget, I have proposed further investments in these technologies, as well as tax credits for businesses and consumers who choose energy-efficient cars, homes, and appliances. I know that Senator Lugar has a specific piece of legislation which would dramatically increase our investment in bioenergy research.

Anything we can do in this area, in my judgment, will have huge paybacks. And so, to all of you, I ask that you do what you can during this August period and when the Congress comes back to put this issue beyond partisan politics, to put it beyond the debate. We're talking about a tiny fraction of the budget for the combined recommendations we have made that can change the whole future of this country and this world, in the way that the automobile and the perfection of the petroleum processing did at the beginning of this century.

I can hardly tell you how strongly I believe that this can happen. And when it does happen, we will look back and be amazed, number one, that we took as long as we did to do it and, number two, how cheap it was to do it for the benefits we got out of it. We will all be amazed.

So anything any of you can do to make sure that 100 years from now somebody can talk about people like these two fine people who just spoke in the same way we talk about the people that perfected petroleum and de-

veloped the automobile: to ensure that more of our farm families get to stay on the farm and people can make a decent living in rural America in an environmentally sustainable way; to liberate America and other countries from their dependence on unstable sources of petroleum; to break the mindset that exists among too many both here and around the world that you cannot have economic development without burning more fossil fuel and, therefore, burning up the planet is just the inevitable consequence of getting ahead; anything you can do to roll back those problems and to create opportunities will be profoundly important to the kind of world our children live in and what people say about you and our generation 100 years from now. It's hard to think of a greater gift we could give at the turn of the century or a new millennium than a clean energy future.

Thank you all, and God bless you for your work.

NOTE: The President spoke at 2:26 p.m. on the Whitten Patio at the Department of Agriculture. In his remarks, he referred to Amal Mansour, chair of the board of directors and chief executive officer, Manufacturing and Technology Conversion International, Inc.; R. James Woolsey, former Director, Central Intelligence Agency; and Professor Bruce E. Dale, chair, Department of Chemical Engineering, Michigan State University.

### **Executive Order 13134—Developing and Promoting Biobased Products and Bioenergy**

*August 12, 1999*

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Federal Advisory Committee Act, as amended (5 U.S.C. App.), and in order to stimulate the creation and early adoption of technologies needed to make biobased products and bioenergy cost-competitive in large national and international markets, it is hereby ordered as follows:

**Section 1. Policy.** Current biobased product and bioenergy technology has the potential to make renewable farm and forestry resources major sources of affordable electricity, fuel, chemicals, pharmaceuticals, and

other materials. Technical advances in these areas can create an expanding array of exciting new business and employment opportunities for farmers, foresters, ranchers, and other businesses in rural America. These technologies can create new markets for farm and forest waste products, new economic opportunities for underused land, and new value-added business opportunities. They also have the potential to reduce our Nation's dependence on foreign oil, improve air quality, water quality, and flood control, decrease erosion, and help minimize net production of greenhouse gases. It is the policy of this Administration, therefore, to develop a comprehensive national strategy, including research, development, and private sector incentives, to stimulate the creation and early adoption of technologies needed to make biobased products and bioenergy cost-competitive in large national and international markets.

**Sec. 2. Establishment of the Interagency Council on Biobased Products and Bioenergy.** (a) There is established the Interagency Council on Biobased Products and Bioenergy (the "Council"). The Council shall be composed of the Secretaries of Agriculture, Commerce, Energy, and the Interior, the Administrator of the Environmental Protection Agency, the Director of the Office of Management and Budget, the Assistant to the President for Science and Technology, the Director of the National Science Foundation, the Federal Environmental Executive, and the heads of other relevant agencies as may be determined by the Co-Chairs of the Council. Members may serve on the Council through designees. Designees shall be senior officials who report directly to the agency head (Assistant Secretary or equivalent).

(b) The Secretary of Agriculture and the Secretary of Energy shall serve as Co-Chairs of the Council.

(c) The Council shall prepare annually a strategic plan for the President outlining overall national goals in the development and use of biobased products and bioenergy in an environmentally sound manner and how these goals can best be achieved through Federal programs and integrated planning. The goals shall include promoting national

economic growth with specific attention to rural economic interests, energy security, and environmental sustainability and protection. These strategic plans shall be compatible with the national goal of producing safe and affordable supplies of food, feed, and fiber in a way that is sustainable and protects the environment, and shall include measurable objectives. Specifically, these strategic plans shall cover the following areas:

- (1) biobased products, including commercial and industrial chemicals, pharmaceuticals, products with large carbon sequestering capacity, and other materials; and
- (2) biomass used in the production of energy (electricity; liquid, solid, and gaseous fuels; and heat).

(d) To ensure that the United States takes full advantage of the potential economic and environmental benefits of bioenergy, these strategic plans shall be based on analyses of: (1) the economic impacts of expanded biomass production and use; and (2) the impacts on national environmental objectives, including reducing greenhouse gas emissions. Specifically, these plans shall include:

- (1) a description of priorities for research, development, demonstration, and other investments in biobased products and bioenergy;
- (2) a coordinated Federal program of research, building on the research budgets of each participating agency; and
- (3) proposals for using existing agency authorities to encourage the adoption and use of biobased products and bioenergy and recommended legislation for modifying these authorities or creating new authorities if needed.

(e) The first annual strategic plan shall be submitted to the President within 8 months from the date of this order.

(f) The Council shall coordinate its activities with actions called for in all relevant Executive orders and shall not be in conflict with proposals advocated by other Executive orders.

**Sec. 3. Establishment of Advisory Committee on Biobased Products and Bioenergy.** (a) The Secretary of Energy shall establish an "Advisory Committee on Biobased Products and Bioenergy" ("Committee"), under

the Federal Advisory Committee Act, as amended (5 U.S.C. App.), to provide information and advice for consideration by the Council. The Secretary of Energy shall, in consultation with other members of the Council, appoint up to 20 members of the advisory committee representing stakeholders including representatives from the farm, forestry, chemical manufacturing and other businesses, energy companies, electric utilities, environmental organizations, conservation organizations, the university research community, and other critical sectors. The Secretary of Energy shall designate Co-Chairs from among the members of the Committee.

(b) Among other things, the Committee shall provide the Council with an independent assessment of:

- (1) the goals established by the Federal agencies for developing and promoting biobased products and bioenergy;
- (2) the balance of proposed research and development activities;
- (3) the effectiveness of programs designed to encourage adoption and use of biobased products and bioenergy; and
- (4) the environmental and economic consequences of biobased products and bioenergy use.

**Sec. 4. Administration of the Advisory Committee.** (a) To the extent permitted by law and subject to the availability of appropriations, the Department of Energy shall serve as the secretariat for, and provide the financial and administrative support to, the Committee.

(b) The heads of agencies shall, to the extent permitted by law, provide to the Committee such information as it may reasonably require for the purpose of carrying out its functions.

(c) The Committee Co-Chairs may, from time to time, invite experts to submit information to the Committee and may form subcommittees or working groups within the Committee to review specific issues.

**Sec. 5. Duties of the Departments of Agriculture and Energy.** The Secretaries of the Departments of Agriculture and Energy, to the extent permitted by law and subject to the availability of appropriations, shall each establish a working group on biobased prod-

ucts and biobased activities in their respective Departments. Consistent with the Federal biobased products and bioenergy strategic plans described in sections 2(c) and (d) of this order, the working groups shall:

- (1) provide strategic planning and policy advice on the Department's research, development, and commercialization of biobased products and bioenergy; and
- (2) identify research activities and demonstration projects to address new opportunities in the areas of biomass production, biobased product and bioenergy production, and related fundamental research.

The chair of each Department's working group shall be a senior official who reports directly to the agency head. If the Secretary of Agriculture or Energy serves on the Interagency Council on Biobased Products and Bioenergy through a designee, the designee should be the chair of the Department's working group.

**Sec. 6. Establishment of a National Biobased Products and Bioenergy Coordination Office.** Within 120 days of this order, the Secretaries of Agriculture and Energy shall establish a joint National Biobased Products and Bioenergy Coordination Office ("Office") to ensure effective day-to-day coordination of actions designed to implement the strategic plans and guidance provided by the Council and respond to recommendations made by the Committee. All agencies represented on the Council, or that have capabilities and missions related to the work of the Council, shall be invited to participate in the operation of the Office. The Office shall:

(a) serve as an executive secretariat and support the work of the Council, as determined by the council, including the coordination of multi-agency, integrated research, development, and demonstration ("RD&D") activities;

(b) use advanced communication and computational tools to facilitate research coordination and collaborative research by participating Federal and nonfederal research facilities and to perform activities in support of RD&D on biobased product and bioenergy development, including strategic planning, program analysis and evaluation,

communications networking, information and data dissemination and technology transfer, and collaborative team building for RD&D projects; and

(c) facilitate use of new information technologies for rapid dissemination of information on biobased products and bioenergy to and among farm operators; agribusiness, chemical, forest products, energy, and other business sectors; the university community; and public interest groups that could benefit from timely and reliable information.

**Sec. 7. Definitions.** For the purposes of this order:

(a) The term "biomass" means any organic matter that is available on a renewable or recurring basis (excluding old-growth timber), including dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, wood and wood residues, animal wastes, and other waste materials.

(b) The term "biobased product," as defined in Executive Order 13101, means a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.

(c) The term "bioenergy" means biomass used in the production of energy (electricity; liquid, solid, and gaseous fuels; and heat).

(d) The term "old growth timber" means timber of a forest from the late successional stage of forest development. The forest contains live and dead trees of various sizes, species, composition, and age class structure. The age and structure of old growth varies significantly by forest type and from one biogeoclimatic zone to another.

**Sec. 8. Judicial Review.** This order does not create any enforceable rights against the United States, its agencies, its officers, or any person.

**William J. Clinton**

The White House,  
August 12, 1999.

[Filed with the Office of the Federal Register, 11:04 a.m., August 13, 1999]

NOTE: This Executive order was published in the *Federal Register* on August 16.

## **Memorandum on Biobased Products and Bioenergy**

August 12, 1999

*Memorandum for the Secretary of Agriculture, the Secretary of Energy, the Secretary of the Treasury, the Administrator of the Environmental Protection Agency*

**Subject:** Biobased Products and Bioenergy

Today I issued an Executive Order, "Developing and Promoting Biobased Products and Bioenergy," to further the development of a comprehensive national strategy that includes research, development, and private sector incentives to stimulate the creation and early adoption of technologies needed to make biobased products and bioenergy cost-competitive in national and international markets.

Consistent with the objectives and activities in that order and to ensure that the Nation moves efficiently to exploit the benefits of expanded use of biobased products and bioenergy, I hereby direct as follows:

- (1) The Secretaries of Agriculture and Energy, in consultation with other appropriate agencies, shall, within 120 days of this memorandum, prepare a report outlining and assessing options for modifying existing respective agency programs in fiscal year 2001 to promote biobased products and bioenergy with a goal of tripling U.S. use of biobased products and bioenergy by 2010. Programs include, among others, conservation and utility programs within the Department of Agriculture (including the Conservation Reserve Program and the Environmental Quality Incentives Program); technology assistance and other small business programs; and education and extension programs. The report also shall include an assessment of: (a) the evidence to determine whether modifications to the tax code are a cost-effective policy option for review by the Department of the Treasury; and (b) the potential to expand use of biobased products and bioenergy by Federal agencies including co-firing with biomass at Federal