



2018 Farm Bill Primer: Energy Title

Congress periodically passes an omnibus farm bill to address agricultural and food programs. The most recent farm bill—the Agriculture Improvement Act of 2018 (P.L. 115-334; 2018 farm bill)—contains 12 titles, including Title IX Energy. The 2018 farm bill is the fourth farm bill to contain an energy title. At issue for Congress may be future discussion of annual funding and oversight of the energy programs as well as (1) the effect of related efforts provided under non-agriculture legislation (e.g., the Renewable Fuel Standard), (2) market activity for conventional energy (e.g., the price of oil), and (3) legislative proposals to address climate change. This *In Focus* summarizes the 2018 farm bill energy title as background and context for coming discussions about these and other related topics.

2018 Farm Bill Energy Title

The 2018 farm bill energy title primarily focuses on support for renewable energy—particularly agriculture-related energy—as well as energy efficiency and bioproducts (e.g., cleaning supplies). The 2018 farm bill reauthorizes eight energy programs and one initiative, and establishes one new program—the Carbon Utilization and Biogas Education Program. It repeals one program and one initiative—the Repowering Assistance Program and the Rural Energy Self-Sufficiency Initiative, respectively. The authorized programs and initiative are:

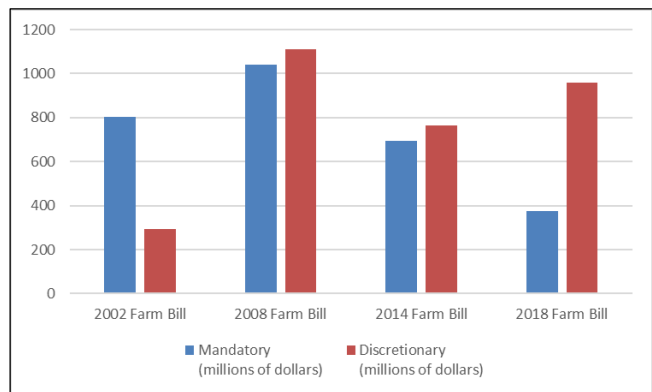
- Section 9002: Biobased Markets Program;
- Section 9003: Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program;
- Section 9005: Bioenergy Program for Advanced Biofuels;
- Section 9006: Biodiesel Fuel Education Program;
- Section 9007: Rural Energy for America Program (REAP);
- Section 9008: Biomass Research and Development Initiative (BRDI);
- Section 9009: Feedstock Flexibility Program (FFP);
- Section 9010: Biomass Crop Assistance Program (BCAP);
- Section 9013: Community Wood Energy and Wood Innovation Program; and
- Section 9014: Carbon Utilization and Biogas Education Program.

Of these activities, six programs and one initiative were amended under the 2018 farm bill (Sections 9002, 9003, 9005, 9007, 9008, 9010, and 9013), and two were generally unchanged (Sections 9006 and 9009). For more discussion of the energy title programs, see CRS In Focus IF10288, *Overview of Bioenergy Programs in the 2018 Farm Bill*, by Kelsi Bracmort.

Energy Title Funding

Like previous bills, the 2018 farm bill authorizes funding for Title IX programs. The five-year FY2019-FY2023 total mandatory funding and the total discretionary funding authorized to be appropriated are \$375 million and \$960 million, respectively (see **Figure 1**). The mandatory funding for the energy title comprises approximately 0.1% of the Congressional Budget Office’s 2018 farm bill total mandatory program estimate of \$428 billion over the same five-year period.

Figure 1. Farm Bill Energy Title Funding, 2002-2018
(in millions of dollars)



Source: CRS Report R43416, *Energy Provisions in the 2014 Farm Bill* (P.L. 113-79): *Status and Funding*, P.L. 115-334, and P.L. 107-171.

Notes: Mandatory funding for the 2002 farm bill covered a six-year period, whereas the other farm bills covered a five-year period.

Mandatory funding for the energy title has varied in each bill—with the largest amount, approximately \$1 billion over five years, provided in the 2008 farm bill (P.L. 110-246). Mandatory funding has declined in each farm bill since. As enacted under the 2018 farm bill, five programs qualify for mandatory funding, fewer than before. The Section 9003 and 9007 programs combined constitute close to 87% of the total mandatory funding in Title IX. However, it is not clear if mandatory funding for the two programs will be provided. Under the previous farm bill, Congress limited or rescinded funding for the Section 9003 program. Congress did not alter mandatory funding levels for the Section 9007 program under the 2014 farm bill.

Under the 2018 farm bill, discretionary funding is authorized for all but one of the energy title programs—the Section 9009 program. For those programs that may receive both mandatory and discretionary funding, the discretionary funding amount authorized is almost equivalent to or exceeds the mandatory funding amount. There is one exception: total discretionary authorization for the Section 9007 program is 40% of the mandatory appropriations provided for the program. Conversely, total discretionary

authorization for the Section 9003 program is five times as much as the mandatory funding provided for the program.

In practice, under the 2014 farm bill, actual appropriations of discretionary funding were lower than the amounts authorized to be appropriated. Only the Section 9007 program received discretionary funding under annual appropriation bills.

Agriculture-Related Energy

Agriculture-related energy is defined, for the purposes herein, as energy derived from agricultural or forestry feedstocks (e.g., crops, woody biomass, food waste, manure). The energy produced from such resources may be in the form of liquid transportation fuels, electric power, or heat. A common name for this type of energy is *bioenergy* (e.g., biofuels, biopower). The most prevalent form of bioenergy is ethanol—a liquid fuel commonly blended with gasoline for use in motor vehicles.

There are opportunities and challenges associated with agriculture-related energy, or bioenergy, production. Bioenergy is often viewed as renewable and as having fewer detrimental environmental effects than conventional energy. Disagreement exists about the environmental effect of certain types of bioenergy (e.g., greenhouse gas emission impacts of cornstarch ethanol, land-use changes, water quality impacts). Some view bioenergy as having the potential to stimulate economic development in rural areas. However, there are limitations—primarily infrastructure and economic—to the production, distribution, and consumption of bioenergy.

Legislative Support for Agriculture-Related Energy

Congress has supported agriculture-related energy for close to 40 years through energy, agriculture, and tax laws. One of Congress's initial measures to support agriculture-related energy was the Energy Security Act of 1980 (P.L. 96-294). This act established a biomass energy program, including an Office of Alcohol Fuels within the Department of Energy, a municipal waste biomass energy program, and several initiatives for forestry energy. Congress created an energy title in the 2002 farm bill (P.L. 107-171), which assisted farmers with purchasing renewable energy systems and increasing energy efficiency. This legislation was followed by the Energy Policy Act of 2005 (P.L. 109-58), which established a renewable fuel standard (RFS) mandate that U.S. transportation fuel contain a minimum volume of biofuel, and by the Energy Independence and Security Act of 2007 (P.L. 110-140), which expanded the mandate. Congress then passed the 2008 farm bill—which renewed authorization for and expanded renewable energy programs established in the 2002 farm bill. Congress passed the 2014 farm bill which extended most of the renewable energy provisions of the 2008 farm bill. Most recently, Congress passed the 2018 farm bill.

Legislative Issues

With the enacted 2018 farm bill, Congress may assess agriculture-related energy in at least three domains—

agriculture, the environment, and economic development. Potential issues for Congress are (1) whether to provide the discretionary funding in upcoming annual appropriations allotted for the energy title programs, (2) whether agriculture-related energy will be a part of the anticipated legislative discussion about both climate change and the U.S. energy portfolio, and (3) whether the energy title programs are having an impact on other legislative efforts (e.g., the RFS, tax extenders).

There are a few points specific to the energy title programs that Congress may consider when addressing the three aforementioned issues. First, many of the energy title programs lack a budget baseline—a projection at a particular point in time of what future federal spending on mandatory programs would be under current law. A baseline gives programs built-in future funding. Thus, the potential renewed authorization in 2024 of some of the energy title programs in the 2018 farm bill would be scored as new mandatory spending and may require budgetary offsets to pay for it in the possible next farm bill.

Second, in the past, there has been minimal discretionary funding provided for energy title programs. Going forward, some may argue that Congress does not need to provide discretionary funding because many of the energy title programs receive mandatory funding. Others may argue that the programs cannot be fully effective if Congress does not appropriate the discretionary funding.

Third, the relationship between other policy mechanisms (e.g., consumption mandates, tax incentives) and the energy title programs remains an issue. The focus of the agriculture-related energy discussion has centered on liquid transportation fuels (i.e., cornstarch ethanol, cellulosic ethanol). Energy policy and tax policy have maintained this focus with the RFS and certain tax credits (e.g., biodiesel tax incentive) and former ethanol tax credits. Congress may debate whether continued support for liquid transportation fuels is necessary via non-agriculture legislation.

Lastly, abundant supplies of domestic oil and natural gas, along with relatively low prices, are a consideration when discussing the energy title programs. The energy title programs were established and expanded when energy prices were higher and energy independence was more of a concern. Presently, it could be difficult for agriculture-related energy to compete strictly on the basis of price with oil and natural gas. However, according to some proponents, agriculture-related energy could have environmental benefits compared to fossil fuels offsetting potentially higher costs. Bioenergy could potentially provide baseload power to the electric power market, and could stimulate economic development in rural areas.

Kelsi Bracmort, Specialist in Natural Resources and Energy Policy

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