



Farm Bill Primer: Energy Title

Congress periodically passes an omnibus farm bill. The most recent farm bill—the Agricultural Act of 2014 (P.L. 113-79; 2014 farm bill)—contains 12 titles that address agricultural and food programs, as well as Title IX, the energy title. The 2014 farm bill is the third farm bill to contain an energy title. With forthcoming discussions about a 2018 farm bill, Congress may discuss the merits of including an energy title. The discussion may involve program funding levels, the effect of related efforts provided under non-agriculture legislation, and market activity for conventional energy. This *In Focus* summarizes the 2014 farm bill energy title as a basis for potentially understanding forthcoming discussions about a 2018 farm bill.

2014 Farm Bill Energy Title

The energy title for the 2014 farm bill primarily focuses on support for renewable energy—particularly agriculture-related energy, energy efficiency, and bioproducts (e.g., cleaning supplies). It reauthorizes funding for nine programs and one initiative:

- Section 9002: Biobased Markets Program;
- Section 9003: Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance Program;
- Section 9004: Repowering Assistance Program (RAP);
- 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); and
- Section 9012: Community Wood Energy Program.

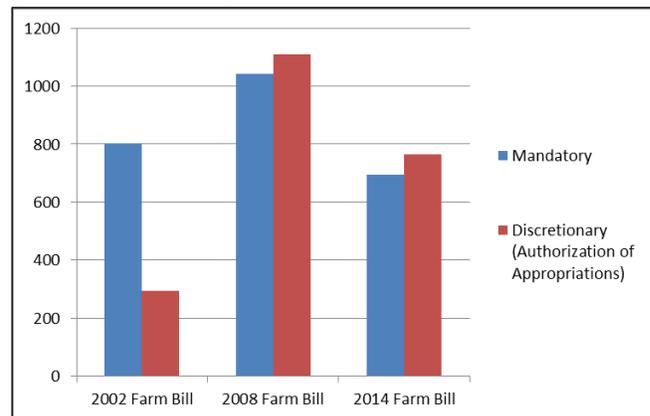
Five energy title programs were adjusted under the 2014 farm bill (Sections 9002, 9003, 9007, 9010, and 9012), and four programs and one initiative were generally left as they were (Sections 9004, 9005, 9006, 9008, and 9009). For more information on the energy title programs, see CRS In Focus IF10288, *Overview of Bioenergy Programs in the 2014 Farm Bill*.

Energy Title Funding

Like previous bills, the 2014 farm bill authorized both mandatory and discretionary funding for Title IX programs. The total mandatory funding authorized and the total discretionary funding authorized to be appropriated for the 2014 farm bill energy title are \$694 million and \$765

million, respectively (see **Figure 1**). The mandatory funding for the energy title comprises approximately 0.1% of the Congressional Budget Office's 2014 farm bill total mandatory program estimate of \$489 billion.

Figure 1. Energy Title Funding
(in millions of dollars)



Sources: CRS Report R43416, *Energy Provisions in the 2014 Farm Bill (P.L. 113-79): Status and Funding*, 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 with each bill—with the largest amount of mandatory funding provided in the 2008 farm bill (P.L. 110-246), approximately \$1 billion. As enacted under the 2014 farm bill, the Section 9003 program and the Section 9007 program combined constitute close to 65% of the total mandatory funding of \$694 million provided for FY2014-FY2018. However, under various subsequent annual appropriations bills, Congress limited or rescinded funding for the Section 9003 program such that when combined the Section 9003 program and the Section 9007 program constitute close to 53% of the total mandatory funding provided for the same time period. Congress did not alter mandatory funding levels for the Section 9007 program.

Under the 2014 farm bill, actual appropriations of discretionary funding have been lower than the amounts authorized to be appropriated. Only one energy title program of the seven programs authorized to receive discretionary funding has received such funding under annual appropriation bills—the Section 9007 program. Under the 2014 farm bill, discretionary funding is authorized for all but two of the energy title programs—the Section 9009 program and the Section 9010 program. For the seven programs and one initiative that may receive discretionary funding, the amount authorized is almost equivalent to or exceeds the mandatory funding amount, with one exception: the Section 9007 program is authorized

to receive discretionary appropriations at an amount 60% less than its mandatory funding level.

Agriculture-Related Energy

Agriculture-related energy is defined, for the purposes herein, as energy derived from resources obtained from an agricultural, forestry, or food regime (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 has fewer environmental effects than conventional energy. Disagreement exists about the environmental effect of certain types of bioenergy (e.g., greenhouse gas emission reduction 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 and agriculture 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. Then 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 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. Finally, Congress passed both the 2008 farm bill—which renewed authorization for and expanded renewable energy programs established in the 2002 farm bill—and the 2014 farm bill.

Legislative Issues

With the advent of a 2018 farm bill, Congress likely will assess agriculture-related energy in at least four domains—agriculture, energy, environment, and economic development. Nearly 15 years after the passage of the first energy title in a farm bill, Congress has some data on performance of the existing programs to examine as it makes its assessment. At issue for Congress is whether to continue to support agriculture-related energy, and, if so, whether to increase or decrease this support, as well as which of the aforementioned domains—if not all—will guide the legislative debate to craft effective agriculture-related energy policy.

Several issues may shape the debate about agriculture-related energy. 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. This baseline gives the programs built-in future funding if policymakers decide the programs should continue. Indeed, six programs (Sections 9002, 9003, 9004, 9005, 9006, and 9010) and one initiative (Section 9008) do not have assured future funding. Thus, any renewed authorization of these programs in a new farm bill would be scored as new mandatory spending and may require budgetary offsets to pay for it.

Congress may address the issue of funding energy title programs in annual appropriations bills. As noted before, one out of seven programs has been funded by discretionary funds. 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.

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 imitated this focus with the RFS and certain tax credits (e.g., biodiesel tax incentive). Congress may choose to debate whether continued support for liquid transportation fuels is necessary through the energy title programs, given these other supportive measures.

Lastly, abundant supplies of domestic natural gas, along with relatively low prices for oil and natural gas, also may shape the energy debate in the farm bill. 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 economically with oil and natural gas. However, agriculture-related energy has other attributes, according to some. It could have environmental benefits, provide baseload power to the electric power market, and potentially stimulate economic development in rural areas. Congress will have the opportunity to discuss these issues and more during the upcoming 2018 farm bill debate.

Related CRS Products

- CRS Report R43416, *Energy Provisions in the 2014 Farm Bill (P.L. 113-79): Status and Funding*.
- CRS Report R44758, *Farm Bill Programs Without a Budget Baseline Beyond FY2018*.
- CRS Report R43325, *The Renewable Fuel Standard (RFS): An Overview*.

Kelsi Bracmort, kbracmort@crs.loc.gov, 7-7283

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