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Energy Programs in the New Farm Bill

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June 26, 2014

farmdoc daily (4):119

Recommended citation format: Coppess, J. "Energy Programs in the New Farm Bill." farmdoc daily (4):119, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, June 26, 2014.

Permalink http://farmdocdaily.illinois.edu/2014/06/energy-programs-in-the-new-farm-bill.html

The Agricultural Act of 2014 (the 2014 Farm Bill; series of articles available here) continues a suite of renewable energy programs in Title IX. Known as the Energy Title, it is a relatively new addition to omnibus farm bill legislation, first appearing in the Farm Security and Rural Investment Act of 2002 and expanded by the Food, Conservation, and Energy Act of 2008. The roots of these programs, however, go at least as far back as the Agricultural Adjustment Act of 1938, which directed the Secretary of Agriculture to conduct research and development on new scientific, chemical, and technical uses for agricultural commodities and byproducts.

Background

Many a first thought on the topic of energy and agriculture is of the Renewable Fuels Standard (RFS) and the production of ethanol for blending in the national transportation fuel supply. The RFS, however, is not a farm bill provision or a substantive part of the farm bill debate; it does not fall directly under the jurisdiction of the House or Senate Agriculture Committees. The RFS made changes to the Clean Air Act via two energy bills, the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 (more information on the RFS can be found here).

The Farm Bill's energy programs can be grouped into three basic varieties: programs with direct assistance to farmers or rural businesses; (2) programs that assist facilities such as biorefineries; and (3) programs to assist with research, development, education and marketing regarding bioenergy and renewable chemicals. The programs do not have permanent authority, expiring with the sunset dates in the bill unless extended or reauthorized by Congress, and they do not have permanent baseline in the Congressional Budget Office (CBO) estimates which means funds must be found to pay for the programs in this title. CBO estimates that Congress provided about \$625 million in mandatory funds (i.e., not subject to the annual appropriations process for funding) energy programs over the five-year life of the new farm bill (fiscal years 2014 to 2018). (Further information on the Energy Title programs, some of which is used in this article, can be found in the Congressional Research Service Report, "Energy Provisions of the 2014 Farm Bill (P.L. 113-79), by Randy Schnepf (March 12, 2014) available here).

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Discussion

(1) Programs for Farmers and Rural Businesses

The Rural Energy for America Program (REAP) (section 9007) was crafted by the 2008 Farm Bill out of the components of two programs created by the 2002 Farm Bill to promote energy efficiency and renewable energy development for farmers and rural small businesses. It uses grants to assist entities that are helping farmers and rural small businesses conduct energy audits used to increase energy efficiency and the use of renewable technologies and resources in their operations. The program also provides assistance through loan guarantees for the purchase and construction of renewable energy systems and to make improvements in an operation's energy efficiency. According to USDA's Rural Development mission area, REAP assistance helps finance renewable energy projects covering renewable biomass, anaerobic digesters, geothermal (both for generating electricity and direct use), small hydroelectric (30 megawatts or less), hydrogen, wind (large and small generation), solar (large and small generation) and even ocean-generated energy (tidal, wave, current and thermal). USDA has stated that, through 2012, REAP helped more than 13,000 farmers, ranchers and small rural businesses.

The 2014 Farm Bill made two substantive changes to REAP as well as providing \$50 million in mandatory funding for each of fiscal years 2014 through 2018. First, the new farm bill creates a three-tiered application process based on the size of the proposed project. Second, the definition for renewable energy system as used in REAP was revised to limit the program to systems that produce usable energy from a renewable energy source but not to include any mechanism for dispensing energy at retail. This limitation arose in the House of Representatives in the 2011 debate over fiscal year 2012 Agricultural Appropriations in response to USDA's use of the program to help retail gasoline stations install ethanol blending pumps and dispensers; the limitation was included in the final version of the 2014 Farm Bill.

Next is the Biomass Crop Assistance Program (BCAP) (section 9011), created by the 2008 Farm Bill to help farmers establish and produce new biomass crops for bioenergy production and deliver the biomass harvested to biomass conversion facilities. The program operates in two separate but related ways. First, farmers looking to grow these new biomass crops can participate as part of a BCAP project area and receive direct assistance with the costs of establishing the new crop (up to 50 percent of the cost but not to exceed \$500 per acre), such as cost of seed, planting, site preparation, etc. Additionally, because many of the new biomass crops are perennials and take at least two to three years to get established, farmers in project areas may also receive annual payments which act as a rental payment for those years when the crop is growing but not harvested or sold. As of a February 2103 report on BCAP, (available here) more than 50,000 acres were enrolled in project areas to grow energy crops across 188 counties in 12 states with an investment topping \$60 million for these projects. Finally, the program makes separate but possibly-related payments to assist with the costs involved in the collection, harvest, storage and transportation of eligible biomass.

This Farm Bill provides \$25 million each fiscal year (2014-2018) in mandatory funds for BCAP. Congress limited the amount that can be provided for collection, harvest, storage and transportation to between 10 percent and 50 percent of the funds. More analysis on the BCAP program is available in a recent <u>article</u> on the Policy Matters website.

(2) Programs Assisting Facilities

The Biorefinery Assistance Program (section 9003) created by the 2002 Farm Bill is extended and renamed the Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance program, seeking greater diversity in the types of projects approved to advance a wider range of technologies, products and approaches. It is a loan guarantee program whereby USDA backs or guarantees loans made by private entities for commercial-scale processing and manufacturing equipment and facilities, including development, construction and retrofitting. Facilities and equipment eligible for assistance are those considered technologically new and used to convert renewable chemicals and other biobased outputs into end-user products. Renewable chemicals are defined as a monomer, polymer, plastic, reformulated product, or chemical substance produced from renewable biomass. This program received mandatory funds of \$100 million for fiscal year 2014 and \$50 million in fiscal years 2014 and 2016.

The Repowering Assistance Program (section 9004) was created by the 2008 Farm Bill and it seeks to encourage existing biorefineries (as of June 2008) to replace fossil fuel usage with energy from renewable biomass. USDA makes payments to the facilities to help with the cost of the new system. The Farm Bill provided \$12 million in mandatory funds for fiscal year 2014.

The Bioenergy Program for Advanced Biofuels (section 9005) was created by the 2008 Farm Bill to provide payments to producers of advanced biofuels to help support and expand their production. An advanced biofuel is one derived from renewable biomass other than corn kernel starch. The 2014 Farm Bill reauthorizes the program and provides \$15 million in mandatory funds for each fiscal year of the bill (2014-2018). The funds are limited such that funds for the largest advanced biofuels refiners (capacity over 150 million gallons per year) are limited to no more than 5 percent of the available money.

Finally the Feedstock Flexibility Program for Bioenergy Producers (section 9010) is a unique program created in the 2008 Farm Bill to allow USDA to purchase raw or refined sugar and sell it to bioenergy producers for the purpose of producing bioenergy. This program operates in conjunction with the sugar support program in Title I of the Farm Bill to avoid having the Commodity Credit Corporation within USDA take forfeitures of sugar in times of low prices and thus helping to ensure that the sugar program is operated at no cost to the Federal government.

(3) Programs for Research, Development, Education and Marketing

The Biobased Markets Program (section 9002) created by the 2002 Farm Bill is reauthorized with \$15 million in mandatory funds over the life of the farm bill. This program provides the authority for the BioPreferred Program, which seeks to promote the purchase and use of biobased products by requiring federal agencies and their contractors to give preferential treatment to designated products when making purchases. The program was modified to require reporting, auditing and enforcement, while clarifying that all forest products regardless of market share are eligible to be included if they meet the biobased content requirements and innovation standards (an innovative approach to growing, harvesting, sourcing, procuring, processing, manufacturing). Forest products are those derived from the practice of forestry or the management of growing timber, including pulp, paper, paperboard, pellets, lumber and any produced derived from recycling forest materials. The Secretary is also required to designate intermediate ingredients or feedstocks and assembled and finished biobased products based on specific criteria for the program. An economic impact study is also required.

The Biodiesel Fuel Education Program (section 9006) awards competitive grants to nonprofit organizations to assist with education on the benefits of biodiesel. Educational efforts are focused on government and private entities with vehicle fleets and the general public, and \$1 million in mandatory funding is provided for each fiscal year 2014 through 2018.

The Biomass Research and Development Program (section 9008) was created in the 2002 Farm Bill and is extended by the 2014 Farm Bill with \$3 million in mandatory funds for fiscal years 2014 to 2018. This program authorizes a board to coordinate research and development activities relating to biofuels and biobased products between USDA and the Department of Energy, as well as to assist and oversee funding and administration of renewable programs.

Conclusion

Issues regarding energy usage and concerns about costs, consumption and security have occupied significant space in our national debate. Recent farm bills have included a variety of programs to increase farm and rural based energy production, to improve efficiency and provide for further research, development, education and even marketing assistance. While the energy title may not be considered a big ticket item in the Farm Bill debate, it does deliver significant results on the ground, on farms and in rural communities.