M E M O R A N D U M

TO: All Colleagues

FROM: Howard Learner, John Moore and Andy Olsen, Environmental Law and Policy Center

RE: Summary of the 2008 Farm Bill’s Energy Title and Other New Clean Energy Development Provisions

DATE: May 22, 2008

With today’s Senate veto override of the Food, Conservation, and Energy Act of 2008, the new Farm Bill is now law. It builds upon the first-ever Energy Title of the 2002 Farm Bill, providing new programs and a stronger federal commitment to farm-based energy.

The total mandatory funding for the Energy Title is $1.12 billion, which compares to $800 million in the 2002 Farm Bill. However, comparing the 2002 and 2008 Farm Bills is not “apples to apples” – program funds are now allocated differently and more favorably. For example, mandatory funding for the Rural Energy for America Program (REAP) (formerly the Section 9006 program) more than doubled from $115 million to $255 million. And this money is over four years rather than five in the last Farm Bill. Separately, the Farm Bill also includes $400 million in cellulosic ethanol tax credits.

Among the highlights in the Energy Title are several programs strongly supported by ELPC, including: (1) improvements and better funding for REAP; (2) new funding for energy audits on farms (included in REAP); (3) new cellulosic ethanol biorefinery financing; (4) energy crop incentives for growers; and (5) new funding for converting fossil fuel power to biomass.

Other programs with mandatory funding include (1) production payments for advanced biofuels, (2) biomass research and development; (3) biobased markets development and (4) biodiesel fuel education. Funding totals for programs are provided below and summarized in the attached table.

Several of these programs also have authorizations for additional discretionary funding, which will need to be secured each year through the annual appropriations process. And several other programs in the Energy Title – for example, a study on the production of fertilizer from...
renewable energy – are entirely contingent on obtaining discretionary funding through the annual appropriations process.

**Highlights of Energy Title Programs with Mandatory Funding**

Note that all dollar figures are for a four-year period from 2009-2012. While the overall Farm Bill covers five years starting in 2008, the Energy Title funding is for four years because 2008 programs have already begun based on interim funding. USDA should establish implementation rules for the new programs by 2009.

**Rural Energy for America Program (REAP)**

- The Rural Energy for America Program (REAP) is the successor to the successful Section 9006 renewable energy and energy efficiency development program.\(^1\) Current program demand is running at least 3 times more than available funds.

- Critically, REAP now includes an energy audit/technical assistance component in which USDA allocates grants to state and regional entities (state governments, universities, rural electric cooperatives, and others) to help farmers and rural businesses become more energy efficient and effectively use renewable energy technologies. $10.2 million over four years is reserved for energy technical assistance. (The 2002 Farm Bill included this program (Section 9005) but it never received funding.)

- Feasibility studies can now be funded, at a 25% match for study costs. No more than 10% of program funds can be awarded for feasibility studies.

- REAP also boosts loan guarantee limits from $10 million to $25 million per project, expands recipient eligibility to other agricultural producers (such as greenhouses) sets aside 20% of funding for projects under $20,000, and requires USDA to improve outreach.

- The total REAP funding is increased to $255 million over four years, more than double the 2002 Farm Bill funding of $115 million. (An additional $100 million in five year discretionary funding is authorized, subject to appropriations.) From another perspective, REAP mandatory funding nearly triples on an annual average basis, from $23 million/year in the 2002 Farm Bill to $63 million/year in this bill.

**Biorefinery Assistance**

- The 2002 Farm Bill included the unfunded Section 9003 biorefinery grant program. The 2008 Farm Bill now includes mandatory funding for both grants and loan guarantees - grants to demonstration scale plants up to 30% of costs, and loan guarantees for commercial scale plants (up to $250 million per plant).

- A wide variety of public, private and cooperative institutions qualify for funding. The program is for advanced biofuel production such as cellulosic ethanol or butanol. Corn starch ethanol is not eligible for assistance under this program.

\(^1\) REAP should not be referred to as the “Section 9006” program anymore, since Section 9006 is now another program.
• This program is funded at $75 million in 2009 and $245 million in 2010, with an additional $600 million authorized discretionary funding over four years 2009-2012.

**Biomass Crop Assistance Program (BCAP)**

• This new program directs USDA to establish project areas in which potential biomass producers and a biorefinery or other facility agree to produce and use biomass crops for conversion to advanced biofuels or bioenergy. The program excludes commodity crops, food and wastes and algae.

• It pays producers up to 75% of costs for establishing and planting crops, plus annual payments (amounts to be determined) to help compensate for lost opportunity costs until crops are established.

• The program also provides cost-share payments for collection, harvesting, storage, and transportation costs at a rate to match the biomass sale price, up to $45 per dry ton.

• All projects must follow conservation or forest stewardship plans.

• BCAP selection criteria will include environmental, community ownership and other desirable conditions. The Conference Manager’s Report for the Farm Bill expresses a preference for perennial crops and highly energy efficient annual crops, and preserving natural resources.

• This program is funded with uncapped mandatory funding; however, Congress estimates that it will cost approximately $70 million over five years.

**Repowering Assistance**

• This program encourages new renewable biomass development to help break the “chicken and egg” cycle of building next-generation biofuels plants. It also can help commercialize energy crops.

• It provides grants or other payments to existing biorefineries to modify their fossil fuel boilers to use renewable biomass. The result: a lower carbon footprint and new markets for energy crops.

• Repowering Assistance is funded at $35 million over four years, plus an additional $60 million in discretionary funding.

**Bioenergy Program for Advanced Biofuels**

• This program encourages production of lower-carbon biodiesel and cellulosic ethanol. It excludes corn starch ethanol from eligibility.

• It pays biofuels producers for production of biofuels based on several factors to be determined by the USDA. Not more than 5% of total payments can be paid to large facilities with a refining capacity of more than 150 million gallons per year.
• We expect that most of this funding will be used for soy biodiesel in the first several years of the new Farm Bill. Planning efforts around the country also are focusing on other oilseed crops.

• Funded at $300 million over four years. An additional $100 million in discretionary funding over four years is allowed.

**Biomass Research and Development**

• This section amends the Biomass Research and Development Act of 2000. Changes affect research program areas and funding distributions, the makeup of the Technical Advisory Committee, and other issues.

• The section focuses research and development in three areas: (1) feedstock development; (2) biofuels and biobased products development; and (3) biofuels development analysis. No one area is to receive less than 15% of funding.

• The legislation directs that biofuels development analysis address energy and environmental impacts including life cycle analysis, presumably relating to greenhouse gas pollution. Another subject is an assessment of the potential for federal lands to increase production.

• Funded at $118 million over four years, plus an additional $140 million in discretionary funding over four years.

**Biobased Markets Program**

• Continues and expands the federal preference for procurement of biobased products and the biobased products labeling program.

• Establishes procurement preference and labeling guidelines, administrative requirements, and other implementation standards.

• Funded at $9 million in mandatory funding over five years, plus $8 million in discretionary funding over four years subject to appropriations.

**Biodiesel Fuel Education Program**

• Continues the existing biodiesel fuel education program with mandatory funding of $5 million over five years.

**Biofuels Infrastructure Study**

• This directs USDA to conduct a study to assess the infrastructure requirements for biofuels production and transport through 2025. The study is intended to be comprehensive and include water requirements, alternative transportation, adequacy of rural roads, impacts on safety of transportation systems, and resource conservation.
Energy Title Programs with Discretionary Funding

**Rural Energy Self-Sufficiency Initiative**

- This program authorizes grants to rural communities to develop and implement energy self-sufficiency, such as building improvements, renewable electricity production with wind, combined heat and power, land use and local transportation improvements.
- The initiative provides cost share grants up to 50% of cost for rural communities to assess energy usage, develop plans and install energy efficiency and integrated renewable energy systems.
- The program is funded with discretionary funding of $20 million over four years.

**Forest Biomass for Energy**

- This section establishes a competitive research and development program to encourage use of “low-value” and other forest biomass for energy. (Low-value biomass is defined to include byproducts of forest health treatment and hazardous fuels reduction.) Other priorities include developing processes to integrate forest biomass into biorefineries, new transportation fuels, and improving growth and yield.
- Eligible recipients include federal agencies, state and local governments, tribes, land grant colleges and private entities.
- The program received discretionary funding of $60 million over four years.

**Community Wood Energy Program**

- The Community Wood Energy Program provides grants to state or local governments to plan and install wood energy systems in community facilities.
- This program could be viewed as the public sector version of Repowering Assistance, since it is intended for central and district heating systems and combined heat and power.
- The program received only discretionary funding of $20 million over four years.

**Renewable Fertilizer Study**

- This directs the Secretary of the USDA to conduct a study to assess the production of nitrogen fertilizer from renewable resources (such as wind power) in rural areas. The study will address processes, technologies, cost-competitiveness, and environmental impacts.
- Funding for this program is $1 million discretionary for fiscal year 2009.
Tax Provisions

The only energy tax credit provision that survived the Conference Committee process is a new cellulosic biofuels production tax credit for up to $1.01 per gallon, available through 2012. This credit will be available for cellulosic biofuels produced from agricultural waste, wood chips, perennial energy crops, and other non-food feedstocks. This credit is worth approximately $400 million over ten years.

Partially to help pay for that credit and other tax credits in the Farm Bill, the legislation reduces the volumetric ethanol excise tax credit ("VEETC" or "blender’s credit") from 51 cents to 45 cents per gallon, subject to some limitations. This provision may raise up to $1.203 billion over five years.

Other proposed tax credits and improvements were not included in the final bill. For example, one improvement not included in the final bill was a solution to the so-called “production tax credit haircut” in which Section 9006 grants undercut the value of the production tax credit for community wind and similar facilities. We are continuing to explore alternative legislative vehicles to include this important provision.

Other Provisions

Several other provisions in the 2008 Farm Bill either directly or indirectly encourage more farm-based energy production and energy efficiency. For example, Title II of the bill significantly increases the size of the Conservation Stewardship Program (formerly the Conservation Security Program), which among other things encourages farmers to use on-farm best practices which save energy. A new Sun Grant program in the Research Title encourages new biobased energy technology development (although this program did not receive any mandatory funding), and other Research Title programs also focus on clean energy development.

CONCLUSION

ELPC is pleased that the draft Energy Title includes many of our recommended improvements – including REAP, energy audits, rural repowering, biomass crop assistance, and advanced biorefinery expansion. Funding remains a concern, which may be improved through supplemental annual appropriations. Let’s work together to achieve the full potential benefits of these clean energy development programs.