

Comprehensive Guide to Federal Biofuel Incentives



July 2006

Prepared by the Office of Maria Cantwell

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Abbreviations:

DOD – U.S. Department of Defense

DOE – U.S. Department of Energy

DOI – U.S. Department of the Interior

EERE – Energy Efficiency and Renewable Energy

EPA – U.S. Environmental Protection Agency

EPACT – Energy Policy Act of 2005 (P.L. 109-58)

FY – fiscal year

IRS – Internal Revenue Service

R&D – research and development

USDA – U.S. Department of Agriculture

Renewable Electricity Production Tax Credit

| Qualifying Resource | Service Date | Amount of Credit* | Credit Period |
|---|---|--|---|
| Closed-loop Biomass (Organic material from plants planted solely to produce electricity) | December 31, 1992 to January 1, 2008 | 1.5 cents per kWh | ▪ 10 years after service date |
| Closed-loop Biomass modified to co-fire with coal and/or biomass | In service before January 1, 2008 | 1.5 cents per kWh times the ratio of the closed-loop biomass thermal content to that for all other fuels in the facility | ▪ 10 years after the placed in service date but beginning no earlier than October 22, 2004 |
| Open-loop Biomass (Cellulosic waste material, agricultural livestock waste or non-hazardous lignin waste material) | Before January 1, 2008 | 0.75 cents per kWh | ▪ 10 years for service dates after August 8, 2005; if before, 5 years beginning on January 1, 2005 |
| Open-loop Biomass using agricultural livestock waste nutrients | October 22, 2004 to January 1, 2008 (capacity of at least 150kW) | 0.75 cents per kWh | ▪ 10 years for service dates after August 8, 2005; 5 years if service date is after August 8, 2005 ▪ Credit period begins on January 1, 2005 if service date is before January 1, 2005 |
| Poultry Waste | December 31, 2003 to January 8, 2008 | 0.75 cents per kWh 1.5 cents per kWh if placed in service after January 1, 2005 | ▪ 10 years for service dates from October 22, 2004 to January 1, 2005 or after August 8, 2005; 5 years for service dates from January 1, 2005 to August 8, 2005 |
| Municipal Solid Waste (includes landfill gas and trash combustion facilities and new units placed on existing facilities) | October 22, 2004 to January 1, 2008 | 0.75 cents per kWh | ▪ 10 years if service date is after August 8, 2005; 5 years if service date is earlier ▪ Credit period begins on January 1, 2005 for units placed in service prior to January 1, 2005 |

* The inflation adjustment factor for the year 2005 is: 1.2528; making the credit for electricity sold in 2005 *1.9 cents* for wind energy, closed-loop biomass, geothermal and solar, *0.9 cents* for open-loop biomass, small irrigation power, municipal solid waste and hydroelectric power, and *\$5.481 per ton* for refined coal.

Renewable Electricity Production Credit (REPC)

Administered by: Internal Revenue Service

Annual funding: N/A

Established: The REPC was established by the Energy Policy Act of 1992, extended in March 2002 as part of the Job Creation and Worker Assistance Act of 2002 and renewed by the 2004 Working Families Tax Relief Act of 2004. The Energy Policy Act of 2005 modified the credit and extended it once again through December 31, 2007.

Scheduled termination: January 1, 2008 for renewable resources; tax credit applies to the first 10 years of operation

Description:

The Renewable Electricity Production Credit (REPC) is a per kilowatt-hour tax credit for electricity generated by qualified energy resources. Section 710 of the "American Jobs Creation Act of 2004", expanded REPC to include additional eligible resources – geothermal energy, open-loop biomass, solar energy, small irrigation power, landfill gas, municipal solid waste combustion, and refined coal – in addition to the formerly eligible wind energy, closed-loop biomass, and poultry-waste energy resources. The Energy Policy Act of 2005 (EPACT 2005) further expanded the credit to certain hydropower facilities. As a result of EPACT 2005, solar facilities placed into service after December 31, 2005 are no longer eligible for this incentive. REPC now applies to wind, closed-loop biomass, open-loop biomass, geothermal energy, small irrigation power (150 kW - 5 MW), municipal solid waste, landfill gas and hydropower.

The REPC provides a tax credit of 1.5 cents/kWh, adjusted annually for inflation, for wind, closed-loop biomass and geothermal. The adjusted credit amount for projects in 2005 is 1.9 cents/kWh. Electricity from open-loop biomass, small irrigation hydroelectric, landfill gas, municipal solid waste resources, and hydropower receive half that rate – currently 0.9 cents/kWh. The duration of the credit is 10 years. However, open-loop biomass geothermal, small irrigation hydro, landfill gas, and municipal solid waste combustion facilities placed into service after October 22, 2004 and before enactment of the Energy Policy Act of 2005 (August 8, 2005) are eligible for the credit for a five-year period. Note, however, that owners of geothermal projects who claim the federal business energy tax credit may not also claim this production tax credit.

A business can take the credit by completing [Form 8835](#), "Renewable Electricity Production Credit," and [Form 3800](#), "General Business Credit."

Qualified applicant: Taxpayers producing electricity from qualified resources who sell the electricity to an unrelated person during the taxable year

For more information: Contact an IRS Information Specialist at 1-800-829-1040 or visit IRS at <http://www.irs.gov>

Renewable Energy Grants and Loan Guarantees

| Title | Agency | Program | Qualified Applicant | Period |
|---|-------------------------------------|---|---|---|
| Rural and Remote Community Electrification Grants | DOE in consultation with USDA & DOI | <ul style="list-style-type: none"> ▪ Increase energy efficiency, site or upgrade transmission & distribution lines, or modernize electric generation facilities | Local government entity, utility or irrigation district, cooperative or nonprofit in a rural area | <ul style="list-style-type: none"> ▪ FY2006 through FY2012 ▪ Funds not appropriated in FY2006 |
| Biomass Commercial Use Grant Program | USDA or DOI | <ul style="list-style-type: none"> ▪ Use of biomass to produce electric energy, sensible heat or transportation fuels ▪ Grants are authorized for up to \$20 per green ton of biomass | Any individual or entity in a preferred community* | <ul style="list-style-type: none"> ▪ FY2006 through FY2016 ▪ Funds not appropriated in FY2006 |
| Improved Biomass Use Grant Program | USDA or DOI | <ul style="list-style-type: none"> ▪ Offset the costs of R&D projects to improve the use of and/or add value to biomass ▪ Grants may not exceed \$500,000 | Any individual or entity in a preferred community* | <ul style="list-style-type: none"> ▪ FY2006 through FY2016 ▪ Funds not appropriated in FY2006 |

* Preferred communities include local government and municipalities near Federal land whose population is less than 50,000 and Indian tribes.

Rural and Remote Communities Electrification Grants

Administered by: Department of Energy in consultation with the Department of Agriculture and the Department of Interior

Annual funding: No funds appropriated for FY2006

Established: Calendar Year 2005 by §209 of Energy Policy Act of 2005

Scheduled termination: Authorized through 2012

Description: The DOE Secretary is authorized to allocate grants each fiscal year to increase energy efficiency, site or upgrade transmission and distribution lines serving rural areas, or to provide or modernize electric generation facilities that serve rural areas. The grants are to be based on a determination of cost-effectiveness and the most effective use of the funds to achieve grant objectives. Preference shall be given to renewable energy which is defined as electricity generated from a renewable energy source or hydrogen produced from a renewable energy source. Renewable energy sources include wind, ocean waves, biomass, solar, landfill gas, incremental hydropower, livestock methane, or geothermal energy.

Qualified applicant: Eligible organizations include a local government or municipality, peoples' utility district, irrigation district, and cooperative, nonprofit, or limited-dividend association in a rural area, a city, town, or unincorporated area of not more than 10,000 inhabitants.

For more information: Visit the DOE Office of Energy Efficiency and Renewable Energy at <http://www.eere.energy.gov/informationcenter/>

Biomass Commercial Use Grant Program

Administered by: Department of Agriculture

Annual funding: Funds authorized but not appropriated for FY2006

Established: Calendar Year 2005 by §210(b) of the Energy Policy Act of 2005

Scheduled termination: Authorized from 2006 to 2016

Description: Authorizes placement of grants to improve the commercial value of forest biomass for electric energy, useful heat, transportation fuels, and other commercial purposes. Biomass commercial use grants may be made to any person in a preferred community that owns or operates a facility that uses biomass as a raw material to produce electric energy, sensible heat, or transportation fuels. To help offset the purchase cost of biomass, a qualified entity may receive up to a \$20 per green ton for biomass delivered.

Qualified applicant: Preferred communities are Indian tribes and local government and municipalities near public land with less than 50,000 people.

For more information: Visit the USDA Rural Development at <http://www.rurdev.usda.gov/rd/energy/>

Improved Biomass Use Grant Program

Administered by: Department of Agriculture

Annual funding: Funds authorized but not appropriated for FY2006

Established: Calendar Year 2005 by §210(c) of the Energy Policy Act of 2005

Scheduled termination: Authorized from 2006 to 2016

Description: The Improved Biomass Use Grant Program is available to entities in preferred communities to offset the cost of projects to develop or research opportunities to improve the use of, or add value to, biomass. Criteria for awarding the grants include: (1) the anticipated public benefits of the project; (2) opportunities for the creation or expansion of small businesses and micro-businesses; (3) the potential for new job creation; (4) the potential for the project to improve efficiency or develop cleaner technologies for biomass utilization; and (5) the potential for the project to reduce the hazardous fuels from the areas in greatest need of treatment.

Qualified applicant: Preferred communities include local government and municipalities near public land whose population is less than 50,000 and Indian tribes.

For more information: Visit the USDA Rural Development at <http://www.rurdev.usda.gov/rd/energy/>

Biofuel Tax Incentives

| Tax Incentives | Agency | Benefit | Qualified Applicant | Period |
|---|---------------|--|--|--|
| Volumetric Ethanol Excise Tax Credit | IRS | \$0.51 per gallon | Blenders of ethanol with gasoline | ▪ Expires 2010 |
| Small Ethanol Producer Credit | IRS | \$.10 per gallon of ethanol produced of first 15 million gallons of ethanol made by a small producer | Any producer with production capacity below 60 million gallons | ▪ Expires end of 2007 |
| Biodiesel Excise Tax Credit | IRS | \$1.00 per gallon \$0.50 per gallon (recycled grease) | Biodiesel producers and blenders | ▪ Expires 2010 |
| Small Producer Biodiesel Credit | IRS | \$.10 per gallon of ethanol produced of first 15 million gallons of ethanol made by a small producer | Any producer with production capacity below 60 million gallons | ▪ Expires end of 2007 |
| Credit for Installation of Alternative Fueling Stations | IRS | Credit for 30% of the cost to install alternative refueling stations; E85 and B20 fueling stations would qualify | Taxpayer who places the refueling property in service | ▪ Effective: Dec. 31, 2005 ▪ Expires: Dec. 31, 2009 |

Volumetric Ethanol Excise Tax Credit

Administered by: Internal Revenue Service

Annual funding: N/A

Established: Calendar Year 2005 by §301 of the American Jobs Creation Act of 2004

Scheduled termination: End of 2010

Description: Gasoline suppliers who blend ethanol with gasoline are eligible for a tax credit of 51 cents per gallon of ethanol.

Qualified applicant: Blenders of gasohol

For more information: Additional information on IRS Publication 378: Fuel Tax Credits and Refunds may be found at <http://www.irs.gov/publications/p378/index.html>

Small Ethanol Producer Credit

Administered by: Internal Revenue Service

Annual funding: N/A

Established: Calendar Year 1990 by §11502 of the Omnibus Budget Reconciliation Act of 1990

Scheduled termination: End of 2007

Description: The small ethanol producer credit is valued at 10 cents per gallon of ethanol produced. The credit may be claimed on the first 15 million gallons of ethanol produced by a small producer in a given year.

Qualified applicant: Any ethanol producer with production capacity below 60 million gallons per year

For more information: Additional information on IRS Publication 378: Fuel Tax Credits and Refunds may be found at <http://www.irs.gov/publications/p378/index.html>

Biodiesel Excise Tax Credit

Administered by: Internal Revenue Service

Annual funding: N/A

Established: Calendar Year 2005 by §302 of the American Jobs Creation Act of 2004 and extended by §1344 of the Energy Policy Act of 2005

Scheduled termination: End of 2008

Description: Biodiesel producers (or producers of diesel/biodiesel blends) can claim a per gallon tax credit. The credit is valued at \$1.00 per gallon of “agri-biodiesel” (biodiesel produced from new agricultural products such as soybean oil or animal fats), or 50 cents per gallon of biodiesel produced from other sources (e.g. recycled fryer grease).

Qualified applicant: Biodiesel producers and blenders

For more information: Additional information on IRS Publication 378: Fuel Tax Credits and Refunds may be found at <http://www.irs.gov/publications/p378/index.html>

Small Producer Biodiesel Credit

Administered by: Internal Revenue Service

Annual funding: N/A

Established: Calendar Year 2005 by §1345 of the Energy Policy Act of 2005

Scheduled termination: End of 2007

Description: An income tax credit for small producers of biodiesel. The biodiesel fuels credit for a taxable year is equal to the sum of a) the biodiesel mixture credit, plus b) the biodiesel credit, plus c) in the case of an eligible small agri-biodiesel producer, the small agri-biodiesel producer credit. The small agribiodiesel producer credit is 10 cents for each gallon of qualified agri biodiesel produced with a small agribiodiesel producer defined as one with an annual production capacity of no more than 60 million gallons. The small producer incentive applies only to 15 million gallons a year from each small producer. Agri-biodiesel production means any agri-biodiesel which during a taxable year is sold by such producer to another person to produce a mixture or for use by another person in trade or business or who sells at retail.

Qualified applicant: Biodiesel producers and blenders

For more information: Additional information on IRS Publication 378: Fuel Tax Credits and Refunds may be found at <http://www.irs.gov/publications/p378/index.html>

Credit for Installation of Alternative Fueling Stations

Administered by: Internal Revenue Service

Annual funding: N/A

Established: Calendar Year 2005 by §1342 of the Energy Policy Act of 2005

Scheduled termination: None

Description: Permits taxpayers to claim a 30% credit for the cost of installing clean-fuel vehicle refueling property to be used in a trade or business of the taxpayer or installed at the principal residence of the taxpayer. 85% of the volume must consist of ethanol, natural gas, compressed natural gas, liquefied natural gas, liquefied petroleum gas, and hydrogen. Any mixture of diesel fuel and biodiesel must contain at least 20% biodiesel. Provisions are included in this section for applying this credit in combination with other business or personal credits.

Qualified applicant: Biodiesel producers and blenders

For more information: Additional information on IRS Publication 378: Fuel Tax Credits and Refunds may be found at <http://www.irs.gov/publications/p378/index.html>

Biofuel Grant Programs

| Title | Agency | Program | Qualified Applicant | Period |
|---|--|--|---|--|
| Bioenergy Program | USDA Commodity Credit Corporation | <ul style="list-style-type: none"> ▪ \$150 million to reimburse ethanol and biodiesel producers for expanding their production capacity | Any ethanol or biodiesel producer who expands capacity | <ul style="list-style-type: none"> ▪ Expires: End of FY2007 |
| Value-Added Grants Program | USDA Rural Business Cooperative Service | <ul style="list-style-type: none"> ▪ \$20.5 million for FY2006 ▪ Provides grants up to \$500,000 to independent producers for development of agricultural activities, including biofuel production | Independent producer, producer group, cooperative, or a majority-controlled producer-based business | <ul style="list-style-type: none"> ▪ Expires: End of FY2006 |
| Biorefinery Development Grants | USDA Rural Development | <ul style="list-style-type: none"> ▪ Program authorized but not funded ▪ Provides biorefinery construction grants | Any non-federal entity or groups of entities intending to build a biorefinery | <ul style="list-style-type: none"> ▪ Expires: End of FY2007 |
| Rural Business Enterprise Grants | USDA Rural Business Cooperative Service | <ul style="list-style-type: none"> ▪ \$40 million to finance development of small and emerging private rural business enterprises ▪ Grants are to a 3rd party to assist a business and not to the business | Public bodies, private nonprofit corporations, and federally recognized Indian Tribal Groups | <ul style="list-style-type: none"> ▪ None |
| Renewable Energy System & Energy Efficiency Improvements | USDA Rural Business Cooperative Service | <ul style="list-style-type: none"> ▪ \$23 million for all projects in the form of grants, loans, and loan guarantees. Biofuel plant construction is eligible. ▪ Grants limited to 25% of project cost; loans limited to 50% of project cost | Farmers, ranchers, and rural small businesses | <ul style="list-style-type: none"> ▪ Expires: End of FY2006, with \$3 million left available for FY2007 |
| Cellulosic Biofuel Production Incentives | DOE in consultation with USDA, DOD & EPA | <ul style="list-style-type: none"> ▪ Incentive program to accelerate annual cellulosic biofuels production to 1 million gallons by 2015 ▪ Ensure rural small business and small feedstock producer participation | Producers of fuels from cellulosic biofuels, agricultural producers or cooperatives of agricultural producers | <ul style="list-style-type: none"> ▪ First year annual biofuel production is 1 billion gallons or 10 years from effective date of 2005 Energy Policy Act, whichever comes first |
| Cellulosic Biomass Ethanol Conversion Assistance | DOE | <ul style="list-style-type: none"> ▪ Assist building of production facilities for the production of cellulosic biomass ethanol using agricultural residues or municipal solid waste | Merchant producers of cellulosic biomass | <ul style="list-style-type: none"> ▪ Funds authorized but not appropriated for FY2006 ▪ Funds authorized for FY2007 |
| Conversion Assistance for Cellulosic Biomass, Waste-Derived Ethanol, Approved Renewable Fuels | DOE | <ul style="list-style-type: none"> ▪ Enable building of production facilities for cellulosic ethanol, waste-derived ethanol, and approved renewable fuels derived from agricultural residues, wood residues, municipal solid waste or agricultural byproducts | Merchant producers | <ul style="list-style-type: none"> ▪ Funds authorized but not appropriated for FY2006 ▪ Funds authorized for FY2007 and FY2008. |

Bioenergy Program

Administered by: Commodity Credit Corporation

Annual funding: \$100 million appropriated for FY2005; up to \$150 million authorized annually for FY2004 through FY2006

Established: FY2001 through CCC's general authority to conduct commodity programs; extended by §9010 of the Farm Security and Rural Investment Act of 2002 (P.L. 101-171) CRS-2

Scheduled termination: End of FY2006

Description: The Bioenergy Program reimburses ethanol and biodiesel producers for expanding their production capacity. Payments help defray the purchase cost of the additional commodities needed for that expansion, and are based on the level of increase, as well as the number of applicants. Eligible commodities include grain and oilseed crops (e.g. barley, corn, soybeans), cellulosic crops (e.g. switch grass, rice hulls), animal fats, agricultural byproducts, and oils.

Qualified applicant: Any ethanol or biodiesel producer who expands production capacity.

For more information: Visit the USDA Farm Service Agency at http://www.fsa.usda.gov/daco/bio_daco.htm

Value-Added Producer Grants Program (VAPG)

Administered by: Rural Business Cooperative Service

Annual funding: \$20.5 million appropriated for FY2006 (up from \$15.5 million in FY2005); part of a \$40 million total annual authorization for several value-added programs

Established: FY2001, expanded in FY2003 to include renewable energy projects by §6401 of the Farm Security and Rural Investment Act of 2002 (P.L. 101-171)

Scheduled termination: End of FY2006

Description: VAPG provides grants to independent producers for the development of value added agricultural activities, including biofuel production. The grants can be used for feasibility studies, the development of a business plan, or to acquire working capital to operate a value-added business. Grants are to enable applicants to pursue markets they are not currently serving. The venture must be focused on this new or developing

market. Value-Added Products must expand the customer base for the product or commodity. Candidate products must then meet one of the following criteria:

- Changing of the physical state or form of the product. Examples include: processing wheat into flour, corn into ethanol, slaughtering livestock or poultry, or slicing tomatoes.
- Producing a product produced in a manner that enhances its value, as demonstrated through a business plan. An example is organically produced products.
- Physical segregation of an agricultural commodity or product in a manner resulting in the enhancement of the value of that commodity or product. Examples: include an identity preservation system for a variety or quality of grain desired by an identified end-user or the traceability of hormone-free livestock to the retailer.
- Any agricultural commodity or product that is used to produce renewable energy on a farm or ranch. Examples: collecting and converting methane from animal waste to generate energy

Grant funds may be used to plan a defined program of economic activities to determine the viability of a potential value-added venture including feasibility studies, marketing plans, business plans and legal evaluations. A maximum of \$100,000 is available for a planning grant. Grant funds can also be used a working capital funds to operate the venture and pay the normal expenses associated with the operation of the venture. A maximum of \$300,000 is available for a working capital grant. Grants are limited to \$500,000 per recipient.

Qualified applicant: Independent producer, producer group, cooperative, or a majority controlled producer-based business venture.

For more information: Visit the USDA Rural Development at <http://www.rurdev.usda.gov/rbs/coops/vadg.htm>

Biorefinery Development Grants (Unfunded)

Administered by: If funded, it would be administered by Rural Development

Annual funding: \$0

Established: Calendar Year 2002 by §9003 of the Farm Security and Rural Investment Act of 2002 (P.L. 101-171)

Scheduled termination: End of FY2007

Description: This program was established by the Farm Security and Rural Investment Act of 2002 (P.L. 101-171). However, no funding has been provided for the program. If funded, the program would provide grants for the development and construction of biorefineries, including those that produce biofuels.

Qualified applicant: Virtually any non-federal entity (including a national laboratory) or group of entities that plans to build a biorefinery

For more information: N/A

Rural Business Enterprise Grants (RBEG)

Administered by: Rural Business Cooperative Service

Annual funding: Approximately \$40 million in each of FY2005 and FY2006

Scheduled termination: None

Description: RBEG provides grants to finance and facilitate development of small and emerging private rural business enterprises. The grant is awarded to a third party to assist a business; grant funds do not go directly to the business.

Qualified applicant: Public bodies, private nonprofit corporations, and federally recognized Indian Tribal groups

For more information: Visit the USDA Rural Development at <http://www.rurdev.usda.gov/rbs/busp/rbeg.htm>

Renewable Energy System and Energy Efficiency Improvements

Administered by: Rural Business Cooperative Service

Annual funding: \$23 million for all projects, including biofuels projects

Established: FY2003 by §9006 of the Farm Security and Rural Investment Act of 2002 (P.L. 101-171)

Scheduled termination: End of FY2006, with \$3 million left available for FY2007

Description: This program provides grants, loans, and loan guarantees for the development of renewable energy projects and energy efficiency improvements. The construction of a biofuel plant could be an eligible project. Grants are limited to 25% of the costs of the project; loans are limited to 50% of the cost of the project.

Qualified applicant: Farmers, ranchers, and rural small businesses

For more information: Visit the USDA Rural Development at <http://www.rurdev.usda.gov>

Cellulosic Biofuel Production Incentives

Administered by: Department of Energy in consultation with the Department of Agriculture, Department of Defense, and Environmental Protection Agency

Annual funding: \$250 million authorized by Energy Policy Act of 2005

Established: Calendar Year 2005 by §942 of the Energy Policy Act of 2005

Scheduled termination: The first year when annual biofuel production is 1 billion gallons or when the Energy Policy Act of 2005 has been in effect for 10 years (whichever comes first)

Description: This program serves as an incentive to accelerate annual cellulosic biofuels production to 1 million gallons by 2015 and to ensure that small feedstock producers and rural businesses are participants in the cellulosic biofuel industry. The program awards a production incentive on a per gallon basis of cellulosic biofuels. At this time, the DOE is in the process of determining how to best implement §942 of the Energy Policy Act and is asking for input through a Request for Information. To learn more about the Request for Information visit <http://www.grants.gov/search/search.do?oppId=9990&mode=VIEW> .

Qualified applicant: Producers of fuels from cellulosic biofuels, agricultural producers, or cooperatives of agricultural producers

For more information: Visit the DOE at <http://www.energy.gov/>

Cellulosic Biomass Ethanol Conversion Assistance

Administered by: Department of Energy

Annual funding: \$250 million for FY2006 and \$400 million for FY2007 authorized by the Energy Policy Act of 2005

Established: Calendar Year 2005 by §1511(e) of the Energy Policy Act of 2005

Scheduled termination: None

Description: Provides commercial producers with grants to assist in the building of production facilities for the production of cellulosic biomass ethanol using agricultural residues or municipal solid waste.

Qualified applicant: Commercial producers of cellulosic biomass ethanol

For more information: Visit the DOE at <http://www.energy.gov/>

Conversion Assistance for Cellulosic Biomass, Waste-Derived Ethanol, Approved Renewable Fuels

Administered by: Department of Energy

Annual funding: \$100 million for FY2006, \$250 million for FY2007, and \$400 million for FY2008 authorized by the Energy Policy Act of 2005

Established: Calendar Year 2005 by §1512 of the Energy Policy Act of 2005

Scheduled termination: None

Description: Provides commercial producers with grants to assist in the building of production facilities for cellulosic biomass ethanol, waste-derived ethanol, and approved renewable fuels derived from agricultural residues, wood residues, municipal solid waste or agricultural byproducts.

Qualified applicant: Commercial producers

For more information: Visit the DOE at <http://www.energy.gov/>

Biofuel Loan Guarantee Program

| Title | Agency | Program | Qualified Applicant | Period |
|---|---|--|---|--|
| Cellulosic Biomass Ethanol and Municipal Solid Waste Loan Guarantee Program | DOE | <ul style="list-style-type: none"> ▪ Authorizes loan guarantees for up to 80% of the cost to construct ethanol production facilities and commercial products from cellulosic, municipal solid waste, and/or sugar cane | Private lending institutions to guarantee loans for biofuel plant construction; each project must have 30 million gallon capacity | <ul style="list-style-type: none"> ▪ Expires: 10 years after effective date of 2005 Energy Policy Act |
| Business and Industry Guaranteed Loans | USDA Rural Business Cooperative Service | <ul style="list-style-type: none"> ▪ Provides guarantees for up to 80% of a loan made for working capital, machinery and equipment, buildings and real estate, and certain types of debt refinancing ▪ Approximately \$1 billion in loans annually | Any legal entity | <ul style="list-style-type: none"> ▪ No schedule termination |

Cellulosic Biomass Ethanol and Municipal Solid Waste Loan Guarantee Program

Administered by: Department of Energy

Annual funding: N/A

Established: Calendar Year 2005 by §1510 of the Energy Policy Act of 2005

Scheduled termination: 10 years after enactment of the Energy Policy Act of 2005

Description: The program authorizes loan guarantees for up to 80 percent to private institutions for the cost of constructing facilities to process municipal solid waste and cellulosic biomass into fuel ethanol and other commercial byproducts.

Qualified applicant: Private lending institutions must guarantee loans for biofuel plant construction and each project must have a 30 million gallon capacity.

For more information: Visit the DOE at <http://www.energy.gov/>

Business and Industry Guaranteed Loans

Administered by: Rural Development Business Cooperative Service

Annual funding: N/A

Established: Consolidated Farm and Rural Development Act (7 U.S.C. 1932, paragraph c)

Scheduled termination: None

Description: The program provides guarantees for up to 80 percent of a loan made for working capital, machinery and equipment, buildings and real estate, and certain types of debt refinancing by a commercial lender. Approximately \$1 billion in loans are distributed at the State level by the Rural Development State Offices annually.

Qualified applicant: Any legal entity, specifically focusing on rural communities with populations less than 50,000

For more information: Visit the USDA Rural Development at http://www.rurdev.usda.gov/rbs/busp/b&i_gar.htm or your Rural Development State Office at http://www.rurdev.usda.gov/recd_map.html

Biofuel Research and Development Assistance

| Title | Agency | Program | Qualified Applicant | Period |
|---|--|--|---|--|
| Bioenergy Program – Biofuels and Bioproducts | DOE | <ul style="list-style-type: none"> ▪ Industry/university partnerships to develop new, price competitive biochemical and thermo chemical conversion technologies from lignocellulosic feedstock and enzyme-based processing systems capable of making biofuels and bioproducts | Industry/university partners | <ul style="list-style-type: none"> ▪ Resources authorized for FY2007 through FY2008 ▪ Seek program guidelines and requirements from DOE-EERE’s Biomass Program |
| Bioenergy Program-Integrated Biorefinery Demonstration Projects | DOE | <ul style="list-style-type: none"> ▪ Demonstrate the commercial application of integrated biorefineries. Shall ensure geographical distribution and consider demonstration of a wide variety of lignocellulosic feedstock, collection and treatment of a wide variety of biomass feedstock, & commercial application for a variety of uses. | Entities with the capability to demonstrate advanced biorefineries | <ul style="list-style-type: none"> ▪ Solicit proposals no later than 6 months after enactment of the 2005 Energy Policy Act |
| Bioenergy Program-University Biodiesel Program | DOE | <ul style="list-style-type: none"> ▪ Demonstration program for electric generation facilities owned by institutions of higher education | Institutions of higher education | <ul style="list-style-type: none"> ▪ Seek program guidelines and requirements from DOE-EERE’s Biomass Program |
| Advanced Biofuel Technologies Program | EPA in consultation with the USDA and the Biomass R&D Technical Advisory Committee | <ul style="list-style-type: none"> ▪ Demonstrate not less than 4 different conversion technologies for cellulosic ethanol and not less than 5 technologies for co-producing value-added bioproducts resulting from the production of biodiesel | Entities with relevant capabilities | <ul style="list-style-type: none"> ▪ Seek program guidelines and requirements from DOE-EERE’s Biomass Program |
| Regional Bioeconomy Development Grants | USDA | <ul style="list-style-type: none"> ▪ Grants for education and outreach to promote growth of a region’s bioeconomy ▪ Each recipient is eligible once for the grant | Regional bioeconomy development associations, agricultural or energy trade associations, or Land Grant institutions | <ul style="list-style-type: none"> ▪ Seek program guidelines and requirements from USDA |
| Biobased Fuels and Products Outreach and Education Program | USDA | <ul style="list-style-type: none"> ▪ Provide training and technical assistance for feedstock producers and public education and outreach for consumers | Within USDA or an independent contracting entity | <ul style="list-style-type: none"> ▪ Seek program guidelines and requirements from USDA |

Bioenergy Program – Biofuels and Bioproducts

Administered by: Department of Energy

Annual funding: \$213 million for FY2007, \$251 million FY2008, and \$274 million for FY2009 authorized to carry out all Bioenergy Programs in §932 of the Energy Policy Act of 2005

Established: Calendar Year 2005 by §932(c) of the Energy Policy Act of 2005

Scheduled termination: None

Description: The program encourages industry and university partnerships to develop price competitive biochemical and thermo chemical conversion technologies from lignocellulosic feedstock and enzyme-based processing systems capable of making biofuels and bioproducts.

Qualified applicant: Industry and university partners

For more information: Visit the DOE Office of Energy Efficiency and Renewable Energy Biomass Program at <http://www1.eere.energy.gov/biomass/>

Bioenergy Program – Integrated Biorefinery Demonstration Projects

Administered by: Department of Energy

Annual funding: \$100 million for FY2007, \$125 million for FY2008, and \$150 million for FY2009 authorized by the Energy Policy Act of 2005

Established: Calendar Year 2005 by §932(d) of the Energy Policy Act of 2005

Scheduled termination: DOE should solicit for proposals no later than 6 months after enactment of the Energy Policy Act of 2005

Description: This program is designed to demonstrate the commercial application of integrated biorefineries. It shall ensure geographical distribution and consider demonstration of a wide variety of lignocellulosic feedstock, collection and treatment of a wide variety of biomass feedstock, and commercial application for a variety of uses. Projects proposals must be able to operate without direct Federal support after initial construction costs are paid.

Qualified applicant: Groups capable of demonstrating advanced biorefineries

For more information: Visit the DOE Office of Energy Efficiency and Renewable Energy Biomass Program at <http://www1.eere.energy.gov/biomass/>

Bioenergy Program – University Biodiesel Program

Administered by: Department of Energy

Annual funding: \$213 million for FY2007, \$251 million FY2008, and \$274 million for FY2009 authorized to carry out all Bioenergy Programs in §932 of the Energy Policy Act of 2005

Established: Calendar Year 2005 by §932(e) of the Energy Policy Act of 2005

Scheduled termination: None

Description: This program establishes a demonstration program for electric generation facilities owned by institutions of higher education. It shall examine the feasibility of operating diesel electric power generators using biodiesel grades as high as B100.

Qualified applicant: Institutions of higher education

For more information: Visit the DOE Office of Energy Efficiency and Renewable Energy Biomass Program at <http://www1.eere.energy.gov/biomass/>

Advanced Biofuel Technologies Program

Administered by: Environmental Protection Agency in consultation with the Department of Agriculture and the Biomass R&D Technical Advisory Committee

Annual funding: \$110 million per year from FY2005 through FY2009 authorized by the Energy Policy Act of 2005

Established: Calendar Year 2005 by §1514 of the Energy Policy Act of 2005

Scheduled termination: None

Description: This program is established to demonstrate advanced technologies for the production of alternative transportation fuels. Funding will be granted to programs that demonstrate 4 or more different conversion technologies for cellulosic biomass ethanol and to programs that demonstrate

5 or more technologies for co-producing value-added bioproducts resulting from the production of biodiesel. Funding will be awarded through a merit based, competitive process.

Qualified applicant: Groups with the relevant capabilities; priority will be given to projects that enhance the geographical diversity of alternative fuels production and utilizes non-traditional ethanol and biodiesel feedstocks.

For more information: Visit the DOE Office of Energy Efficiency and Renewable Energy Biomass Program at <http://www1.eere.energy.gov/biomass/>

Regional Bioeconomy Development Grants

Administered by : Department of Agriculture

Annual funding: \$1 million for FY2006 authorized by the Energy Policy Act of 2005

Established: Calendar Year 2005 by §945 of the Energy Policy Act of 2005

Scheduled termination: None

Description: This program establishes a grant to support and promote the growth of a region's bioeconomy through coordination, education, outreach, and other appropriate endeavors. This grant will be awarded through a competitive process, each recipient is eligible for one grant under this program, and grant recipients must provide matching non-Federal funds equal to the amount of the grant received.

Qualified applicant: Regional bioeconomy development associations, agricultural or energy trade associations, or Land Grant institutions

For more information: Visit the USDA at <http://www.usda.gov/wps/portal/usdahome>

Biobased Fuels and Products Outreach and Education Program

Administered by: Department of Agriculture

Annual funding: \$1 million per year from FY2006 through FY2010 authorized by the Energy Policy Act of 2005

Established: Calendar Year 2005 by §947 of the Energy Policy Act of 2005

Scheduled termination: None

Description: This establishes a program to provide training and technical assistance for feedstock producers to promote producer ownership, investment, and participation in operating biobased processing facilities. It would also provide public education and outreach on biobased fuels and product for consumers.

Qualified applicant: Within the USDA or an independent contracting agency

For more information: Visit the USDA at <http://www.usda.gov/wps/portal/usdahome>