



# RENEWABLE ENERGY

## *Sustainable Agriculture Agenda for the 2007 Farm Bill*

### *Background:*

As America looks to increase its production of renewable energy, it is critical that it be pursued in a manner that benefits family farmers and rural communities and protects the environment. The conservation of natural resources, including soil, water and air quality, wildlife habitat and native biodiversity, must be a major focus of agriculturally-based energy production systems. Currently, both the federal government and many state governments are setting ambitious corn-ethanol and oilseed-biodiesel production goals with insufficient attention paid to the sustainability and environmental impacts of this biofuel production. At the same time, however, research and development of cellulosic ethanol production is accelerating with the possibility of agriculturally-based energy production using a wide array of plants and cropping systems.

There is now widespread anticipation of commercialization of integrated bio-refineries and agricultural supply networks for feedstock production to support a new cellulosic ethanol industry and growing bio-economy. In addition, wind-based and solar energy production in rural areas is providing energy for individual farms, local communities, and the large regional electricity markets.

As this new array of energy and fuel production based on agricultural and rural land is emerging, the time is right to ensure that the environmental performance of current agricultural energy systems is improved and that future agriculturally-based energy is produced in sustainable systems that minimize environmental degradation. These systems should also be designed to take advantage of the emerging opportunities to improve soil health, water quality and wildlife habitat by integrating diverse, perennial energy crops into agricultural systems.

### *Specific Reform Measures:*

- Sustainability criteria should guide all farm bill conservation and energy title programs that seek to promote renewable energy.
- Bio-energy and bio-refinery programs authorized in the farm bill should include a major focus on local and producer ownership.
- The inclusion of energy as a designated resource of concern within the Conservation Security Program (CSP) is an important innovation that should be continued and expanded, including enhancements for cellulosic energy perennial and rotational or cover crop production in the context of a comprehensive conservation plan.
- A Sustainable Agriculture Energy Innovation Grants Program should be instituted to determine the ecological and economic feasibility of producing energy from a new array of feedstock crops through innovative demonstration projects.
- The Renewable Energy and Energy Efficiency Program (Section 9006), which offers grants to those demonstrating financial need for energy efficiency improvements or creating renewable energy production systems, should be reauthorized and expanded.

*Talking Points:*

- U.S. energy policy has flagged biofuels and bioenergy production from our nation's agricultural land base as important in achieving national energy independence. Agriculturally-based energy sources are touted as "renewable" and "clean and green." But this will be the case only if U.S. energy strategy ensures the environmental integrity and sustainability of our rural land, environment and communities.
  - This will require the development and application *of a basic set of sustainability criteria to guide conservation and energy programs.*
  - In addition, bio-energy and biorefinery programs should include *priorities for local ownership and coordination with family farm and rural community development objectives.*
  - The highest priority for energy policy should be *energy conservation and energy efficiency* in all sectors of the U.S. economy. In agriculture, we need research and evaluation of energy use in a wide array of agricultural systems, throughout the entire life cycle of the system, coupled with evaluation of the system's environmental performance.
- *The Conservation Security Program is ideally suited to provide conservation assistance to a wide-array of agricultural systems that can include energy production, as well as food, forage and fiber.* The CSP already contains incentives for on-farm energy efficiency, on-farm renewable electricity generation and on-farm renewable fuel production. In the new version of CSP, enhancement payments should be added for converting acres to perennial species for cellulosic energy by assisting with establishment costs such as land preparation, seeding, management, and foregone income. Practices could include use of native species, diversified specie mixes, delayed forage harvest, and eliminated soil tillage. The highest payment should reward conversion of annual crop acres to perennials. Payments could be higher for the establishment period and lower when harvest begins.
- A sustainable approach to agriculturally-based energy production will need varied feedstocks based on perennial plants, cover crop systems, or resource conserving crop rotations that combine crops produced for food, forage, fuel, and fiber. Developing these new feedstocks will require a focused program to evaluate the ecological and economic feasibility of new agricultural systems – a *Sustainable Agricultural Energy Innovation Grants Program*. This program would serve as *the link to close the gap between small-scale research efforts and full-scale commercialization.* It should be implemented on a regional basis, to avoid concentrating agriculturally-based energy production in a few regions of the country and to relieve intense pressure for increased production on the nation's highest quality farmland at the cost of soil degradation and decreased environmental quality.
- *The Section 9006 program should be reauthorized with increased funding and with a greater emphasis on energy efficiency of small and mid-sized farms.* The emphasis should be on achieving overall, net energy efficiency in sustainable systems rather than on gaining marginal efficiencies from high input systems that continue to require high net levels of energy consumption.