

Renewable Energy Reserve Program

Hundreds of millions of dollars have been invested in public and private research directed at converting renewable cellulosic materials into transportation fuel and electricity. The Administration proposes to continue and expand the public research funding stream to \$1.6 billion over five years in its Farm Bill proposal. Such a massive investment in research represents a crucial step towards greater U.S. energy independence, but it cannot achieve its goal of creating a new agricultural industry in a vacuum. The research agenda assumes that ample supplies of reasonably-priced feedstock will be available at some point in the near future, even though the industry required to supply these raw materials is barely in its infancy.

Broad recognition that demand for reasonably-priced cellulosic feedstock could outrun supply has raised interest in policies to encourage feedstock production. Recent attention has been focused on the possibility of opening up the Conservation Reserve Program for harvesting biomass. Such a proposal, with certain payment restrictions, appears in the Administration's current Farm Bill package. This proposal would seem to address the question of "where can we get the acres to increase biomass output?" in a straightforward fashion. However, the CRP is designed to achieve conservation goals. Many of its objectives (e.g., protecting vulnerable soils, expanding wildlife habitat) would be compromised by permitting harvesting at the producer's convenience, while it would be difficult to build conversion industries around restricted harvesting schedules designed to achieve conservation objectives.

Moreover, a CRP-based strategy would exclude the use of tens of millions of acres of farmland that are currently sitting idle but not eligible for CRP because they have no recent cropping history. A program specifically designed to retire land from production like CRP does not accommodate the abandoned and under-utilized farmland that dots the landscape in many parts of the country. Although some of this land has fallen out of the country's working land base because of its low cropping potential, much of it has been orphaned by economic conditions that have forced smaller farming operations out of business and permitted agriculture in some regions to fall below a "critical mass" of active producers. This potentially productive, idle farmland is the first land that should be called on to produce renewable energy, since it can fulfill this role without cutting into output from any other agricultural sector.

We are proposing a new cropland reserve program, operating in parallel to but not within the Conservation Reserve Program. **The Renewable Energy Reserve Program (RERP)** would require a ten- to fifteen-year commitment from the landowner, along with the establishment of perennial crops suitable for biomass production, in order to receive program benefits. Benefits would include one-time reimbursement of up to 50% of crop establishment costs and an annual payment to the landowner modeled on CRP land rents for the first three years of program participation (five years for a woody biomass crop), extendible at a reduced rate through subsequent years for any producer who can document annual crop sales to an energy user (ethanol plant, pelletizing company, co-firing electricity plant, etc.) Phasing out land rental payments after three years (five years for woody crops) will discourage signup in locations where potential user industries are unlikely to emerge, or on land more appropriate for participation in CRP. Landowners who sign up for the RERP could withdraw after five years, but only after reimbursing the Federal government, with interest, for all benefits received prior to contract termination.

A Renewable Energy Reserve Program run along these lines, with an enrollment target of 10 million acres, might cost \$3.25 billion over the life of the 2007 Farm Bill, with the largest outlay for the crop establishment cost-sharing aspect of the program. A one-page comparison of CRP provisions and those of the proposed RERP is attached.

Comparison between the Conservation Reserve Program and the Renewable Energy Reserve Program

	CRP Provisions	Proposed RERP Provisions
Central purpose	Conservation objectives (soil erosion, water quality; protecting wetlands and other wildlife habitat)	Energy supply objectives (ramp up production of low-input energy crops)
Eligible land	Complex set of eligibility criteria (e.g. erodability index, land that has been cropped during a recent 5-year period, etc.)	Landowner's option; requires only that the land be planted to a perennial crop suitable for bioenergy production (grain and oilseed crops ineligible)
Selection criteria	Environmental Benefits Index used to rank proposed contracts	First-come first-serve within state-level acreage targets based on input from state FSA offices; state targets would be reviewed biennially
Landowner's commitment	10-15 years, with significant penalty for withdrawing land before end of contract	Same
Rental payments	Established in relation to local rental value for land of comparable quality; continue for life of contract	Same for establishment period; continue at a reduced rate thereafter, contingent on sale of crop to an energy user
Cost sharing	Up to 50% of initial cost of approved conservation practices	Up to 50% of the cost of establishing the bioenergy crop, subject to \$per/acre ceilings
Target program acreage	2002 Farm Bill authorized 39.2 million acres	10 million acres
Program cost	Baseline budget scores CRP at \$25.6 billion over 10 years; Administration proposes level funding; average land rents nationwide are currently approximately \$50/acre	Total of \$3.25 billion over the first 5 years [1 billion to cover cost share for establishment of crops, assuming most acreage would be in grasses; 2 billion for land rent payments; \$250 million for technical assistance and administrative costs]
Environmental benefits	<ul style="list-style-type: none"> • Soil and water conservation in vulnerable areas • Wildlife habitat protection • Open space protection (limited value, since most CRP land is located in regions where this is not a pressing concern) 	<ul style="list-style-type: none"> • Carbon-neutral energy production • Open space protection, including land now threatened by sprawl in states like NY, Michigan, Virginia, and PA that do not have much CRP and CREP land • Low-input, sustainable cropping systems
Rural economic benefits	<ul style="list-style-type: none"> • Source of income for farmers and landowners • Modest additional economic benefits (hunting and other recreation) 	<ul style="list-style-type: none"> • Source of income for farmers and landowners • Cornerstone of a new rural industry (transportation, processing etc. imply income and employment multipliers)

NOTE: The administration's Farm Bill proposal would allow biomass crops to be harvested on CRP land, with payments reduced to cover only income foregone or costs incurred to meet conservation requirements in years when biomass crops are harvested (mechanism unclear); it would further restrict harvesting until after nesting season. This would seem to be an uncomfortable blending of conservation and energy policy objectives within a single program, and it would provide negligible incentives for perennial energy crop production in large number of states that do not have large areas now enrolled in CRP, some of which have made heavy policy and R&D investments in the development of alternative energy.

COST ASSUMPTIONS: The establishment cost subsidy estimate assumes a cap of \$75/acre for grasses and \$750/acre for woody biomass, with 95% of program acreage in perennial grasses or grass-legume mixes. Rent subsidy estimate based on average rent during the first three years of the agreement at \$50, dropping to \$25 for subsequent years, assuming that full acreage is signed up in the first year and that all producers will qualify for extended rent subsidy by documenting sales to energy users. These estimates are almost certainly on the high side, since the program might take two or three years to reach its initial sign-up targets.