

November 2021

Rural Energy for America Program Fact Sheet

The Rural Energy for America Program (REAP) was created in the 2008 farm bill to provide federal grants and loans to renewable energy projects. While designed to primarily promote rural solar, wind, hydropower, and other projects, the program has also subsidized the mature corn ethanol and soy biodiesel industries. As recently as <u>September 2021</u>, corn ethanol interests received funding despite Congressional prohibitions within the program. Wasteful farm bill subsidies take many forms, but corn- and soy-based biofuel supports stand out as particularly egregious because of the tens of billions of dollars in subsidies the industries have already received over the past 40 years. Not only are these subsidies wasteful, but they also create additional long-term climate and environmental liabilities for taxpayers.



A corn field ready for harvest in Nebraska

Significant expansion of REAP has been proposed in the recent budget reconciliation package, in addition to stand-alone legislation introduced in the current Congress. The most recent House reconciliation bill proposed approximately \$2 billion in REAP spending over the next six years, on top of the \$1.2 billion that has already been spent over the last decade. Other budget reconciliation proposals would expand similar subsidies for bioenergy and other types of energy through a new clean electricity performance program, performance neutral tax credits, a clean energy accelerator program, and other new initiatives. While Congress and President Biden's priorities align on some of these new investments, a realistic analysis of whether these policies would actually benefit the climate must first be completed since significant evidence points to the contrary. Otherwise, status quo policies will continue to subsidize the same types of

bioenergy and other forms of energy that have failed to significantly reduce greenhouse gas (GHG) emissions as Congress once envisioned. Most bioenergy produced to date has been derived from land- and input-intensive crops such as corn and soybeans that compete with food, feed, and other uses, creating upward pressure on <u>commodity prices</u> and ultimately the conversion of <u>carbon-rich land</u> to cropland use.

While USDA halted its practice of subsidizing ethanol blender pumps through REAP, it switched gears to instead dispense biofuel infrastructure subsidies through a different funding account – the <u>Commodity Credit Corporation</u> (CCC) - which is normally reserved for dispensing farm subsidies authorized by Congress. Both the Obama and Trump Administrations chose to circumvent Congress and subsidize biofuels infrastructure projects through the CCC, and President Biden has continued the practice. Through the Consolidated Appropriations Act enacted in Dec. 2020, the biofuels lobby is due to receive \$700 million in taxpayer support to make up for lower 2020 production levels due to the COVID-19 pandemic as well. Taxpayers will again be stepping in to subsidize the mature industry even though 2020 sales losses were far lower than initial expectations (the industry itself says losses totaled less than \$4 billion, as compared to an initial estimate of \$10.5 billion).

This fact sheet details how over the past decade, more than \$1.2 billion in taxpayer subsidies have been spent through REAP on mature bioenergy industries, in addition to other wasteful projects, sometimes directly contradicting Congressional intent.

Background

REAP is funded though the farm bill. The farm bill, renewed approximately every five years, is a wide-ranging piece of legislation that funds everything from nutrition assistance programs and broadband internet to agricultural subsidies for the production of crops such as corn and soybeans. More specifically, farm bill bioenergy programs, first introduced in 2002, provide grants, loans, and other subsidies to energy efficiency, renewable energy, biofuels, and biomass (heat and power) projects. REAP and most other bioenergy programs are administered by USDA's Rural Development office. In total, the 2018 farm bill bioenergy programs were projected to cost taxpayers <u>\$625 million</u> over ten years (spread out over Fiscal Years (FY) 2019-2028). REAP receives the bulk of the funding as the only farm bill bioenergy program to receive permanent mandatory funding of <u>\$50 million</u> per year in addition to discretionary (optional) funding of \$20 million for each year from FY19-23. REAP received <u>\$500 million</u> of the projected <u>\$625 million</u> mandatory spending total in the farm bill. Overall funding for farm bill bioenergy programs has <u>declined</u> slightly from the <u>2014 farm bill</u>, which is a welcome first step toward reining in wasteful spending that works at cross purposes with other federal programs aimed at clean water and climate protection, just to name a few.

Projects receiving farm bill bioenergy support broadly range from universities researching and developing new uses of biomass sources such as wood and agricultural residues, to large, established corn ethanol and soy biodiesel companies receiving grants or loans for annual production of biofuels (not to mention similar subsidies on the way in the name of COVID-19 relief). Other bioenergy projects funded by taxpayers include anaerobic digesters that create energy from animal manure; grants and loans to individuals or companies for wind, solar, geothermal, energy efficiency, and other renewable energy projects (through REAP); and

federally-backed loan guarantees for so-called "next generation" biofuels facilities that produce biofuels other than corn ethanol.

Types of Projects Receiving Taxpayer Funding

While the majority of REAP funding goes to solar projects, USDA has also awarded \$31.7 million to corn ethanol facilities and gasoline stations installing ethanol blender pumps. Even though Congress did not authorize REAP funding to be spent on <u>ethanol blender pumps</u>, ethanol lobbyists went around policymakers' backs and convinced USDA to allocate more taxpayer dollars to the mature biofuel in 2011 when the end of the \$6-billion-per-year ethanol tax credit (known as VEETC) became imminent. Congress prohibited this practice in 2014. In May 2015, however, USDA unilaterally announced <u>\$100 million</u> in taxpayer subsidies for ethanol blender pumps through the CCC. Furthermore, in Feb. 2020, USDA announced an additional <u>\$100 million</u> in grants for a similar Higher Blends Infrastructure Incentive Program (HBIIP), again using CCC funding without Congressional approval.

As Table 1 shows, 74 percent (\$889 million) of REAP grants and loans from Nov. 2010 to Sept. 2021¹ went to solar projects. Energy efficiency and energy audit projects received the second highest level of subsidies (seven percent), followed by biogas and anaerobic digesters (six percent) and biomass <u>projects</u> (three percent). Biomass projects include everything ranging from the installation of wood boiler systems to feasibility studies for wood pellet manufacturing for both domestic and international use. These types of biomass projects have been linked to increased climate liabilities when U.S. forests are cut down for the production of wood pellets, for instance, which are then exported to Europe to be burned in biomass power plants, leading to *increased* – instead of *decreased* – <u>GHG emissions</u>. Ethanol blender pumps and corn ethanol facilities received another three percent of funding, followed by grain dryers, wind, biodiesel, hydropower, geothermal, and irrigation projects.

Taxpayer dollars have also been squandered on special interest projects such as hot tubs, bridal stores, limousine companies, oxygen monitoring systems for catfish farms, installation of tobacco production equipment, replacement of "syrup evaporators," and construction of confined poultry feeding operations. Many of these are normal costs of doing business that taxpayers should not be shouldering.

For a list of references for REAP funding announcements, please see footnote #1.

http://www.rd.usda.gov/files/RD_REAPAwardsOct2015.pdf, http://www.rd.usda.gov/files/RD-RBS-REAP-RecipientsJuly 11 2016.pdf, http://www.rd.usda.gov/files/RD-REAPAwardsOct2016.pdf,

https://www.rd.usda.gov/sites/default/files/earth_day_project-_list_apri_-22_-2021.pdf, https://www.rd.usda.gov/sites/default/files/2019-12/USDA_REAP_NR_CHART121019.pdf https://www.rd.usda.gov/sites/default/files/reap_electricchart090821.pdf

¹ <u>https://www.agri-pulse.com/ext/resources/pdfs/r/e/a/1/1/REAP_Feasibility_20Jan11.pdf,</u> <u>http://www.usda.gov/wps/portal/usda/usdahome?contentid=2013/09/0191.xml&contentidonly=true,</u> <u>https://www.rd.usda.gov/files/RD-EarthDay2015.pdf,</u> <u>http://www.rd.usda.gov/files/RBS_REAPAwardsJul24_2015.pdf,</u> <u>http://www.rd.usda.gov/files/USDARD_ALInvestments2015.pdf,</u>

Table 1: Rural Energy for America Program Projects, Nov. 2010 to Sept. 2021							
Types of Projects	Loan/Grant Amount	% of Amount					
Solar	\$889,238,533	74%					
Energy efficiency and energy audits*	\$82,540,025	7%					
Anaerobic digesters and biogas	\$78,230,126	6%					
Biomass	\$32,741,893	3%					
Ethanol & blender pumps	\$31,735,351	3%					
Grain dryers*	\$26,119,725	2%					
Other, tobacco, or unknown	\$23,959,329	2%					
Wind (or wind & solar)	\$13,840,379	1%					
Soy and other types of biodiesel	\$9,665,602	1%					
Hydropower	\$8,427,189	1%					
Geothermal	\$5,356,068	0.4%					
Irrigation*	\$4,566,025	0.4%					
TOTAL	\$1,206,420,246						
* Note that some grain driver and irrigation projects may be categorized under "operaty efficiency"							

* Note that some grain dryer and irrigation projects may be categorized under "energy efficiency" projects since USDA did not provide detailed information for some entries. Therefore, the number of grain dryers and irrigation systems that received grants or loans under REAP may be underestimated.

On top of blender pump subsidies for the ethanol industry, REAP has also awarded taxpayer subsidies to at least 15 corn ethanol facilities since Nov. 2010, with the majority awarded since <u>Oct. 2015</u> (see Table 2). This is despite the fact that Congress prohibited corn starch ethanol from receiving farm bill energy title program subsidies. Ethanol facilities are presumably receiving REAP payments since they may also produce ethanol from milo (also known as sorghum) in addition to corn. Meanwhile, even though farm bill bioenergy programs were intended to help the next-generation biofuels industry get off the ground, the program has only made <u>one award</u> to a cellulosic ethanol company in Kentucky.

Table 2: REAP Subsidies for Corn Ethanol Facilities, Nov. 2010 to Sept. 2021										
State	Recipient	Project Description	Jan. 2011	Oct. 2015	Oct. 2016	Dec. 2019	Sept. 2021	Total Amount		
		Constructing a carbon capture processing &								
ND	Red Trail Energy LLC	storage facility onto an existing ethanol plant.					\$25,000,000	\$25,000,000		
NE	Siouxland Ethanol LLC	To purchase and install the equipment for the retrofitting of an ethanol facility.			\$500,000			\$500,000		
	Nebraska Mid									
	America Agri			\$500,000				\$500,000		
NE	Products/Wheatland	Ethanol production								
WI	Badger State Ethanol	To purchase and install the equipment for the retrofitting of an ethanol facility			\$492,327			\$492,327		
IA	Iowa Golden Grain			\$250,000				\$250,000		
	Chippewa Valley									
	Ethanol Cooperative	To make energy efficiency improvements with			\$250,000			\$250,000		
MN	LLP	the evaporator of ethanol refinery.								
IA	Lincolnway Energy	Creating Biofuel from Ethanol Production				\$250,000		\$250,000		
	Heartland Corn					\$250,000		\$250,000		
MN	Products	Creating Biofuel from Ethanol Production				\$230,000		\$250,000		
	Hankinson					\$250,000		\$250,000		
ND	Renewable Energy	Creating Biofuel from Ethanol Production				\$230,000		+====		
NE	E Energy Adams	Creating Biofuel from Ethanol Production				\$250,000		\$250,000		
	Little Sioux Corn	To make energy efficiency improvements with			\$165,000			\$165.000		
IA	Processors LLC	the retrofitting of an ethanol refinery.								
	Siouxland Energy	To make energy efficiency improvements with			\$165,000			\$165,000		
IA	Cooperative	the retrofitting of an ethanol refinery.								
	Lincolnland Agri-	To purchase and install a fermenter for ethanol			\$77,984			\$77,984		
		production.	¢50.000					¢50.000		
IVIIN	DENCO II, LLC	Ethanol production	\$50,000					\$50,000		
NJ	East Coast Energy Solutions	atural gas.	\$47,500					\$47,500		
TOTAL			\$97,500	\$750,000	\$1,650,311	\$1,000,000	\$25,000,000	\$28,497,811		

Even though biomass, biodiesel, and ethanol/blender pump projects only received seven percent of REAP funding during this timeframe, tens of millions of taxpayer dollars were still spent on mature industries that have received taxpayer subsidies for decades. These types of bioenergy have been found to *increase* – instead of *decrease* - greenhouse (GHG) emissions, increasing climate liabilities. Unlike the federal Renewable Fuel Standard (RFS), the farm bill energy title fails to require that taxpayer subsidies go toward projects with the most environmental benefits. In fact, none of the 9,100 REAP projects – including those for biomass, corn ethanol, or biodiesel - must prove that subsidized projects reduce <u>GHG emissions</u>, avoid feedstock plantings on sensitive land such as wetlands or grasslands, avoid competition with the food supply, limit water pollution, etc. The lack of safeguards results in taxpayer dollars being spent on projects that do not deliver the environmental or climate benefits REAP set out to achieve.

Conclusion

Even though the Rural Energy for America Program was designed to promote renewable energy sources such as solar and wind, taxpayer dollars have also been wasted on the mature corn ethanol, biodiesel, and biomass industries, sometimes without Congressional approval. Congress and the Biden Administration are currently considering additional taxpayer support for renewable energy within upcoming reconciliation and other legislative packages. Instead of repeating past mistakes, including subsidizing energy sources that worsen climate change, policymakers should instead focus on eliminating perverse incentives, limiting future long-term liabilities, and investing in programs that promote innovation, prosperity, and opportunity for communities, industries, and taxpayers alike.

While REAP may no longer dispense taxpayer funding for ethanol blender pumps, some of the most recent USDA REAP announcements demonstrate that the corn ethanol industry continues to find ways to reap subsidies not originally intended for it. Meanwhile, other USDA programs continue to subsidize ethanol infrastructure projects, and special interests also successfully lobbied Congress to receive even more subsidies due to the COVID-19 pandemic. REAP has also subsidized the soy biodiesel industry which has already received at least \$20 billion in duplicative federal <u>tax credits</u> over the past 15 years, not to mention another \$30 billion over the next ten years if the tax credit is extended as the House Ways and Means Committee has proposed. Finally, taxpayer dollars in REAP have also been spent on industries that increase environmental and climate liabilities, such as woody biomass for heat and power, in addition to wasteful special interest projects that cover normal costs of doing business, such as replacing agricultural producers' grain bins and irrigation motors.

In summary, wasteful REAP subsidies should be eliminated in favor of investments in real, lasting climate solutions.

For more information, visit taxpayer.net or contact Taxpayers for Common Sense at 202-546-8500.