

# Rural Energy for America Program (REAP)



Committed to the future of rural communities.

03-07-2012



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# Purpose

Program is designed to promote energy efficiency and renewable energy development for agricultural producers and rural small businesses.

# Applicant Eligibility

## Applicant:

- must be an agricultural producer (Greater than 50% of income from farming operation).
- rural small business as defined by the SBA

<http://www.sba.gov/content/table-small-business-size-standards>

- must be citizens of the U.S.
- must not have federal judgments or delinquent federal taxes

# Project Eligibility

## Project:

- Must be for the purchase of a *renewable energy system*
- Must be to purchase *energy efficiency improvements*.
- Must be for commercially available and replicable technology
- Must have technical merit
- Rural Small Business Projects must be located in a rural area.  
To check, go to:  
<http://eligibility.sc.egov.usda.gov/eligibility/welcomeAction.do>
- Agricultural Producer projects have no rural limitations.
- **Cannot be used for residential improvements.**
- **Cannot be used for ag. tillage equipment, used equipment, & vehicles.**

# Types of Eligible Projects

- Energy Efficiency Improvements
  - Freezers & Coolers
  - Lighting Improvements, Window & Plumbing Upgrades, Insulation
  - Replacement Grain Dryers
  - Replacement Irrigation Units (diesel to electric, high presser to low presser, traveler to pivots)
  - Greenhouse heating, lighting, and cooling improvements
  - High efficiency motors, pumps, fans, blowers, compressors
  - Upgrading / Replacing HVAC equipment
  - Documented efficiency improvements per energy audit

# ***Energy Efficiency Improvements***

## ***Energy Curtains***



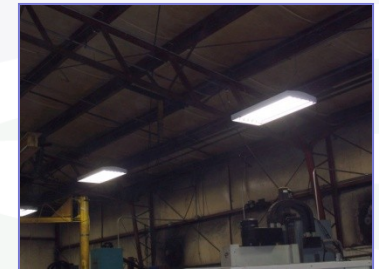
## ***Cooler Upgrades***



## ***Grain Dryer Replacement***



## ***Lighting Upgrades***



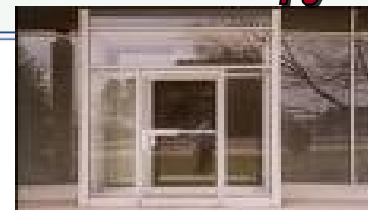
## ***Irrigation***



## ***Motor Upgrades***



## ***Window & Door Upgrades***



# Types of Eligible Projects

- Renewable Energy Systems
  - Wind
  - Solar
  - Biomass / Biofuel
  - Anaerobic Digester
  - Geothermal
  - Hydropower
  - Flex Fuel Pumps



# ***Renewable Energy Systems***

## ***Solar***



## ***Bio-Energy***



## ***Geo Thermal***



## ***Anaerobic Digesters***



## ***Wind***



## ***Renewable Biomass***





# Eligible Project Costs

- Post-application purchase and installation of equipment
  - Post-application construction or project improvements
  - Permit Fees
  - Retrofitting (Post- Application)
  - Professional Service Fees, except application preparation
  - Feasibility Studies (required prior to application submission)
  - Business Plans (required prior to application submission)
  - Energy Audits (required prior to application submission)
- 
- **Program funds cannot be used for projects already installed.**

# Rural Energy for America Program (REAP) Grants

Grant Request	<b>Up to 25% of eligible project costs</b> <b>Annual funding cycle</b> <b>State and Nationally competitive</b> <b>Grants &gt; \$20,000 &amp; Grant \$20,000 or less</b>
Grant Amounts	<b>Depends on project type</b>
•Energy Efficiency	<b>Minimum: \$1,500    Maximum: \$250,000</b>
•Renewable Energy	<b>Minimum: \$2,500    Maximum: \$500,000</b>
Grant Uses	<b>Purchase and installation of renewable energy systems or energy efficiency improvements</b>
Applicant Types	<b>Ag Producers and Rural Small Businesses</b>
Community size	<b>Population up to 50,000 for Rural Small Business</b> <b>No Limitations for Agricultural Producer</b>

# Grant Applications

## Simplified Application

- Projects with Eligible Costs \$200,000 or less
- More streamlined technical report required.
- Examples can be provided.

## Full Application

- Projects with Eligible Costs over \$200,000
- Requires additional documentation for the technical report
- Additional Financial Documentation required.

# Rural Energy for America Program (REAP)

## Loan Guarantees

% of Loan Guaranteed	<b>Up to 85% guaranteed</b> <b>Guaranteed loan up to 75% of total eligible project costs</b>
Loan Amounts	<b>Minimum: \$5,000 Maximum: \$25 Million</b>
Loan Terms	<b>Real Estate – 30 yrs</b> <b>Machinery &amp; Equipment – 20 yrs</b> <b>Term Working Capital – 7 yrs</b>
Fees	<b>One-time guarantee fee of 1%.</b> <b>Annual renewal fee of 0.25% on outstanding balance</b>
Loan Uses	<b>Purchase and installation of renewable energy systems or energy efficiency improvements</b>
Borrower Types	<b>Ag Producers and Rural Small Businesses</b>
Community size	<b>Population up to 50,000 for Rural Small Business</b> <b>No Limitations for Agricultural Producer</b>

# REAP Grant/Loan Guarantee

## “Combination”

Maximum of 25% GRANT	Grant regulations apply.
Maximum of 50% LOAN GUARANTEE	Loan Guarantee regulations apply.
Fees	Loan Guarantee fee applies.
Uses of Funds	Purchase and installation of renewable energy systems or energy efficiency improvements
Borrower Types	Ag Producers and Rural Small Businesses
Community size	Population up to 50,000 for Rural Small Business No limitations for Agricultural Producers
BENEFITS	Combination projects <u>may</u> receive funding priority over grant only requests.

# Rural Energy For America Program (REAP)

## Feasibility Study

- **For Renewable Energy Systems**

- Grant funding available to conduct feasibility study for renewable energy systems.

(Feasibility Study required for any REAP Application in excess of \$200,000)

- Applicant Eligibility – Agricultural Producer or Rural Small Business
- Maximum grant amount is \$50,000 or up to 25% of total eligible costs, which ever is less
- Funds held at national level – Competitive selection



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

## **Energy Audits and Renewable Energy Development Assistance – EA/REDA**

- Grant funding to assist with cost of performing energy audits or technical assistance for renewable energy projects (site selection, resource assessments)
- Applicant Eligibility – Colleges and Universities, units of State or Local Government, Rural Electric Cooperatives, Public Power Entities
- Maximum grant amount is \$100,000
- Funds held at national level – Competitive selection



# RURAL DEVELOPMENT TOOLS

- **FACT SHEET ON PROGRAM**
- **SAMPLE APPLICATION OF SIMPLIFIED PROJECTS  
(<\$200,000)**
- **COMPUTER TEMPLATES – GRANTS & GUARANTEED  
LOANS**
- **SCORING SHEET WITH SUGGESTIONS**
- **TECHNICAL REPORT WORKSHEET FOR SIMPLIFIED  
PROJECTS**
- **TECHNICAL REPORT TIDBITS / SUGGESTIONS**

# Michigan REAP – Last 3 Years

	2009	2010	2011
<b>MI Grant Allocation</b>	<b>\$518,895</b>	<b>\$1,879,450</b>	<b>\$1,306,991</b>
<b>Grant Apps. Received</b>	<b>53</b>	<b>76</b>	<b>202</b>
<b>Selected for Funding</b>	<b>33</b>	<b>67</b>	<b>83</b>
<b>% Selected</b>	<b>62%</b>	<b>88%</b>	<b>41%</b>
<b>Funds Obligated</b>	<b>\$1,646,642</b>	<b>\$2,372,414</b>	<b>\$2,374,354</b>

# HISTORICAL REAP ACTIVITY – MI (2002-2011)

Type		Grant (\$)	Loan (\$)	Projects
<b>Renewable Energy</b>				
Wind		\$271,397	\$0	13
Geothermal		\$193,942	\$0	12
Anaerobic Digester		\$2,748,683	\$0	6
Biomass / Biofuel		\$2,091,823	\$700,750	16
Solar		\$1,412,090	\$154,500	59
Hybrid (Geothermal & Solar)		\$55,724	\$0	2
<b>Total Renewable</b>		<b>\$6,773,659</b>	<b>\$855,250</b>	<b>108</b>
<b>Energy Efficiency</b>				
General		\$603,036	\$0	30
Grain Dryer Replacement		\$2,128,540	\$811,720	64
Energy Curtain		\$208,660	\$0	7
<b>Total EE</b>		<b>\$2,940,236</b>	<b>\$811,720</b>	<b>101</b>
<b>REAP Feasibility</b>		<b>\$225,246</b>	<b>N/A</b>	<b>11</b>
<b>REAP Energy Audit</b>		<b>\$300,000</b>	<b>N/A</b>	<b>3</b>
<b>TOTAL REAP</b>		<b>\$10,239,141</b>	<b>\$1,696,970</b>	<b>223</b>

# Program Levels - Fiscal Year 2012

- **\$12,500,000 Million for Grants**
- **\$48,500,000 Million for Loan Guarantees**
- **\$880,000 Million for Energy Audits**
- **\$500,000 Feasibility Studies**

# Michigan REAP Allocations – FY2012

- **Grants \$20,000 or less** **\$140,000**
- **Grant greater than \$20,000** **\$146,000**
- **Guaranteed Loans** **\$1,382,206**

# Case Study - Irrigation System Improvements



- 2010 REAP Grant
- Total Project Cost \$46,835
- Project to replace existing diesel engine with electric motor and variable frequency drive to power the crop irrigation well pump.
- Energy Audit projected annual savings of 115,823 kWh or \$5,176 – Payback est. 9 years
- Actuals for 2010 – 73,750 kWh  
2011 – 140,606 kWh

# Case Study – Grain Dryer Replacement



- 2010 REAP Grant
- Total Project Cost \$127,746
- Project is to replace existing in-bin dryer with a Brock SQ 36A Grain Dryer.
- Energy Audit projected annual savings of 44%, which is 1,289.39 MBTUs or \$17,860 - Payback est. 7.2 years

Actual for 2010 – 2,177.62 MBTU  
2011 – 1,936.15 MBTU



# Case Study - Anaerobic Digester



- 2005 REAP grant
- Total Project Cost \$2,145,038
- Project is to purchase and install a complete mix, two stage Anaerobic Digester on 2300 head dairy. Goal is to make farm self sufficient & sell excess to utility. Payback 8.7yrs
- Actuals for 2007 – 3,748 MW  
2008 – 3,681MW  
2009 – 3,402 MW  
2010 - 4,931 MW  
2011 - 5,169 MW

# Application Time Lines

- Grants **March 30,2012**
- Guaranteed Loans **June 29, 2012**
- Combinations **March 30,2012**  
(Grant /Guaranteed Loan)
- Feasibility Study Grant **March 30, 2012**
- Energy Audit Grant **February 21, 2012**

## Business Programs

Business and Industry Guaranteed Loans  
Rural Energy for America Program Grants & Loans  
Rural Business Enterprise Grants  
Value Added Producer Grants  
Renewable Energy Program Loans & Grants  
Intermediary Re-lending Program Loans  
Rural Economic Development Loans and Grants  
Cooperative Development Assistance

# USDA – Rural Development

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