Rural Energy for America Program (REAP)

Committed to the future of rural communities.

03-07-2012
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

Irrigation

Motor Upgrades

Lighting Upgrades

Window & Door Upgrades

USDA Rural Development
Committed to the future of rural communities.
Types of Eligible Projects

• Renewable Energy Systems
  – Wind
  – Solar
  – Biomass / Biofuel
  – Anaerobic Digester
  – Geothermal
  – Hydropower
  – Flex Fuel Pumps
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                          | Up to 25% of eligible project costs  
|                                        | Annual funding cycle  
|                                        | State and Nationally competitive  
|                                        | Grants > $20,000 & Grant $20,000 or less  
| Grant Amounts                         | Depends on project type  
| **Energy Efficiency**                 | Minimum: $1,500  Maximum: $250,000  
| **Renewable Energy**                  | Minimum: $2,500  Maximum: $500,000  
| Grant Uses                            | Purchase and installation of renewable energy systems or energy efficiency improvements  
| Applicant Types                       | Ag Producers and Rural Small Businesses  
| Community size                        | Population up to 50,000 for Rural Small Business  
|                                        | No Limitations for Agricultural Producer  

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**

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

**“Combination”**

<table>
<thead>
<tr>
<th>Maximum of 25% GRANT</th>
<th>Grant regulations apply.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum of 50% LOAN GUARANTEE</td>
<td>Loan Guarantee regulations apply.</td>
</tr>
<tr>
<td>Fees</td>
<td>Loan Guarantee fee applies.</td>
</tr>
<tr>
<td>Uses of Funds</td>
<td>Purchase and installation of renewable energy systems or energy efficiency improvements</td>
</tr>
<tr>
<td>Borrower Types</td>
<td>Ag Producers and Rural Small Businesses</td>
</tr>
</tbody>
</table>
| Community size | Population up to 50,000 for Rural Small Business
No limitations for Agricultural Producers |
| BENEFITS | Combination projects may 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
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

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MI Grant Allocation</strong></td>
<td>$518,895</td>
<td>$1,879,450</td>
<td>$1,306,991</td>
</tr>
<tr>
<td><strong>Grant Apps. Received</strong></td>
<td>53</td>
<td>76</td>
<td>202</td>
</tr>
<tr>
<td><strong>Selected for Funding</strong></td>
<td>33</td>
<td>67</td>
<td>83</td>
</tr>
<tr>
<td><strong>% Selected</strong></td>
<td>62%</td>
<td>88%</td>
<td>41%</td>
</tr>
<tr>
<td><strong>Funds Obligated</strong></td>
<td>$1,646,642</td>
<td>$2,372,414</td>
<td>$2,374,354</td>
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</tbody>
</table>
## HISTORICAL REAP ACTIVITY – MI (2002-2011)

<table>
<thead>
<tr>
<th>Type</th>
<th>Grant ($)</th>
<th>Loan ($)</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Renewable Energy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind</td>
<td>$271,397</td>
<td>$0</td>
<td>13</td>
</tr>
<tr>
<td>Geothermal</td>
<td>$193,942</td>
<td>$0</td>
<td>12</td>
</tr>
<tr>
<td>Anaerobic Digester</td>
<td>$2,748,683</td>
<td>$0</td>
<td>6</td>
</tr>
<tr>
<td>Biomass / Biofuel</td>
<td>$2,091,823</td>
<td>$700,750</td>
<td>16</td>
</tr>
<tr>
<td>Solar Hybrid (Geothermal &amp; Solar)</td>
<td>$1,412,090</td>
<td>$154,500</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>$55,724</td>
<td>$0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Renewable</strong></td>
<td>$6,773,659</td>
<td>$855,250</td>
<td>108</td>
</tr>
<tr>
<td><strong>Energy Efficiency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>$603,036</td>
<td>$0</td>
<td>30</td>
</tr>
<tr>
<td>Grain Dryer Replacement</td>
<td>$2,128,540</td>
<td>$811,720</td>
<td>64</td>
</tr>
<tr>
<td>Energy Curtain</td>
<td>$208,660</td>
<td>$0</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total EE</strong></td>
<td>$2,940,236</td>
<td>$811,720</td>
<td>101</td>
</tr>
<tr>
<td><strong>REAP Feasibility</strong></td>
<td>$225,246</td>
<td>N/A</td>
<td>11</td>
</tr>
<tr>
<td><strong>REAP Energy Audit</strong></td>
<td>$300,000</td>
<td>N/A</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL REAP</strong></td>
<td>$10,239,141</td>
<td>$1,696,970</td>
<td>223</td>
</tr>
</tbody>
</table>
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 – 3,681 MW
  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

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