

United States Department of Agriculture
Natural Resources Conservation Service
Minnesota

Date Received:

TSP Certification Plan Review Checklist

**Agricultural Energy Management Plan
Conservation Activity Code (128)**

(Refer to CAP 128 Criteria for a complete listing of required documentation)

Purpose: The purpose of the checklist is to provide guidance for elements that need to be addressed or included in the Conservation Activity Plan (CAP). The checklists are recommended for use by NRCS staff and Technical Service Providers, but are not required. NRCS staff can use the checklist for administrative review of the sample plans submitted as part of the certification process as well as all other plans submitted after a TSP is certified. TSPs can use the checklist for a general guidance of elements to include in the plan, but it is still the TSP's responsibility to follow the CAP Plan Development Criteria for specific elements and the detail of each element to be included.

Instructions: The checklist should be completed and submitted with the sample plan or the hardcopy of the client's plan as described below:

- **Prospective TSP's** should submit the completed checklist and sample plan by mail or email (complete plans should be sent as a single electronic file for example pdf, word or scanned file) to the appropriate State TSP Coordinator for administrative review to ensure the plan contains all necessary components. Once administrative review is complete then the State TSP Coordinator should forward the sample plan to National Headquarters for technical review. A list of State TSP Coordinators is located at: <https://techreg.sc.egov.usda.gov/RptStateContact4Admin.aspx>. States should submit the complete plan and checklist by mail or email to the TSP Team. (See below for address information.)
- **Certified TSP's** should submit the completed checklist, hardcopy and electronic copy of the client's plan to the local NRCS Field Office or appropriate State TSP Coordinator for administrative review. A list of State TSP Coordinators is located at: <https://techreg.sc.egov.usda.gov/RptStateContact4Admin.aspx>.
- **NRCS Staff** should complete the checklist for administrative review and place the completed checklist in the client's file. Administrative review involves a review of the content of the plan to ensure all required elements are present, but does not involve technical review for correctness. (Please Note: If technical review is needed, the completed checklist and client plan should be forwarded to the appropriate State Office staff or NHQ for technical review.)

Agricultural Energy Management Plan, Headquarters (CAP 128)

State/County:	Date Plan Submitted:
Producer/Owner:	Technical Service Provider:
<p>Definition: An Agricultural Energy Management Plan (AgEMP) CAP 128 is a detailed documentation of energy consuming components and practices of the current farming operation and the opportunities available to the producer to explore that address their on-farm energy conservation concerns and objectives.</p> <p>Minimum components of a Headquarters AgEMP (128) shall include:</p>	

A.	General AgEMP Criteria:
	<p>The CAP 128 shall be developed by a certified Technical Service Provider (TSP). A listing of AgEMP, CAP 128 certified TSPs is located at the website: http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/tsp/</p>
	<p>The AgEMP - Headquarters meets the Type 2 on-farm energy audit minimum criteria established in the ANSI/ASABE S612 July2009 Performing On-farm Energy Audits standard, hereafter referred to as the industry standard.</p>
B.	Criteria for Specific Elements of an AgEMP Headquarters:
	<p>1. The Cover page of the AgEMP contains the following:</p> <ul style="list-style-type: none"> • Farm name, owner name (if different from farm), street address and county/state • Primary phone number of the producer • Primary Enterprise of the farm • TSP identification (Name, email address and primary phone number) • Date AgEMP was finalized
2.	Summary Reporting of Energy Practices:
	<p>Table 1 (shown on the next page) has been provided in the summary section of the AgEMP report. Table 1 contains the following details:</p> <ul style="list-style-type: none"> • Each of the various recommended improvement measures, sorted by priority of installation. • Documented estimates of energy use reduction, energy savings, installation cost, and energy cost savings.
	<p>Table 2 (shown on the next page) has been provided in the summary section of the AgEMP report. Table 2 contains the energy savings by energy type, as a percent of total energy usage,</p>
	<p>Table 3 (shown on the next page) has been provided in the summary section of the AgEMP report. Table 3 contains estimated reduction in greenhouse gas emissions and air pollutants must be provided for each recommended energy improvement measure</p>

Table 1. Summary of Energy Efficiency Improvements

Recommended Measure	Estimated Annual Reduction in Energy Use					Estimated Costs, Savings, Payback, and Prioritization for Implementation			
	Electric Savings (kWh)	Natural Gas Savings (ccf)	Propane Savings (Gal)	Other ^{1/}	Energy Savings (MMBtu)	Installed Cost [a]	Annual Cost Savings [b]	Payback in Years [a/b]	Estimated Life in Years ^{2/}
-									
Totals									

Table 1 Notes:

- 1) Use the Other column to aggregate any miscellaneous sources of energy.
- 2) Estimated Life is expected useful life of the equipment recommended with standard O&M activities.

Table 2. Annual Energy Savings if Recommendations are Fully Implemented

Fuel	Current Usage	MMBTU Usage	Savings	MMBtu Savings	% Savings
Electricity (kWh)					
Propane (Gal)					
Natural Gas (ccf)					
Diesel Fuel (gal)					
Other					
Totals					

Table 3: Estimated Annual Reduction of Pollutants.

Environmental Benefits						
Recommended Measure	Energy Savings (MMBtu)	Greenhouse Gases			Air Pollutant Co-Benefits	
		Estimated CO ₂ (lbs)	Estimated N ₂ O (lbs)	Estimated CH ₄ (lbs)	Estimated SO ₂ (lbs)	Estimated NO _x (lbs)
Totals						

3.	Background and Site Information – The AgEMP provides a narrative for:
	a. Facility location(s)
	b. Type, size and overall management scheme of the operation (e.g., a description of the poultry, dairy, field crop enterprise, etc., along with production levels, and any unusual factors that affect energy use)
	c. Producer concerns and objectives for the enterprise (i.e., description of why the producer wants an on-farm energy audit and their specific objectives)
	d. An aerial map or equivalent drawing indicating the farm operation to include all the structures included in the AgEMP (animal housing, shops, grain storage, processing, etc.) the headquarters and the fields that were evaluated in the farming operation.
4.	Documentation of Current Equipment and Baseline Current Energy Use: The AgEMP will provide, at a minimum, comprehensive documentation of the prior year energy consumption for the primary farm enterprise.
	The evaluation of energy usage has been broken down by the major activities listed in, but not limited to, the ASABE S612 production category for the primary farm enterprise.
	The usage and costs for the prior year energy consumption shown by energy resource.
	All major activities associated with the primary enterprise are documented by describing the components, primary equipment, and/or details of the activity, as appropriate according to the amount of energy used.
	An estimate of the annual energy usage for each activity is provided.
	An estimate of hours in use per year for each component evaluated is provided.
5.	Energy Improvement Measures: The AgEMP will identify potential energy improvement practices that will reduce energy use and address the energy management concerns of the entire agricultural operation. The AgEMP must provide appropriate estimated energy savings relative to the baseline energy use for each examined improvement practice.
5a.	For each measure examined, the report presents:
	(1) The estimated energy savings—first in the common sale units (kWh, gallons, etc.) and secondly in the energy units of millions of British Thermal Units (MMBtu)
	(2) The estimated energy cost savings
	(3) The estimated installed cost
	(4) The estimated reductions in emissions with specific estimates for CO ₂ , N ₂ O, CH ₄ , SO ₂ , and NO _x .
	(5) The simple payback period in years
	(6) Estimated life in years of the recommended measure.

5.	Energy Improvement Measures: The AgEMP will identify potential energy improvement practices that will reduce energy use and address the energy management concerns of the entire agricultural operation. The AgEMP must provide appropriate estimated energy savings relative to the baseline energy use for each examined improvement practice.
	Documentation for recommended improvement measures is sufficient to allow a third party to evaluate the recommendations.
	Calculations or the basic data that was used to calculate the energy savings must be included within the report.
	The audit reflects non-discounted prices for reporting the installation cost and payback period. Incentives such as EQIP payments or state energy rebates are not factored into installation cost estimates.
	All recommendations are closely linked to improvements that optimize energy use. Improvements primarily related to production improvement may be noted but are not a part of the energy analyses.
	The report clearly distinguishes those measures that have the most benefit. The auditor has explained any improvement measures that were considered but found to be too expensive or having a very long payback period.
6.	Signature Page - The signature page provides the following:
	<ul style="list-style-type: none"> a. Farm identification <ul style="list-style-type: none"> (1) Farm name, owner name (if different from farm), street address and county (2) Primary enterprise of farm
	<ul style="list-style-type: none"> b. TSP certification statement <ul style="list-style-type: none"> (1) A statement to the effect that the auditor possesses the technical expertise and experience to perform on-farm energy audits and that the report meets all the requirements of ASABE S612 (per §6.1) and NRCS CAP 128 (2) The signature of the TSP and date
	c. Producer certification statement
	d. NRCS certification statement
7.	References
	<ul style="list-style-type: none"> a. The AgEMP includes technical documentation of sources used for the Headquarters AgEMP. The report includes the actual documents or web sites that contain technical information used to gain energy savings in the report.

Yes	No	Checklist Approval	
		I have administratively reviewed this Agricultural Energy Management Plan and it meets the Plan Development Criteria for Conservation Activity Plan 128.	
NRCS Representative Name and Title (print or type):			
NRCS Representative Signature			Date:
Notes (If "No" is checked, include reasons for denial, comments, missing items that need to be added, etc.):			

Email:

tsp@wdc.usda.gov

Mailing Address:

Technical Service Provider Team
 USDA - Natural Resources Conservation Service
 1400 Independence Ave SW, Room 6016
 Washington, DC 20250