

CARAT Strategy Form

Name of Requestor (Individual or Legal Entity): _____

Current Address: _____

Phone Number: _____ Email Address: _____

Signature: _____ Date: _____

Description of Climate Smart Strategy for Implementation:

Estimated Cost of Strategy: _____ Approved NRCS Practice Code: _____

Practice implemented on Owned Land/Facility Leased Land/Facility

Practice (NRCS code)	Description	Expected benefit
Feed additives that suppress methane emissions. (592)	Using approved feed additives that inhibit methane formation in the rumen, such as 3-nitrooxypropanol (Bovaer; approved by FDA 05/28/2024).	Reduced methane emission. Effectiveness depends on the feed additive and on following a strict protocol. Scientifically proven expected emission reductions > 10% are eligible for funding.
Various plant-based additives and plant extracts. (592)	Manipulate rumen fermentation and inhibit or stimulate various groups of microbes.	Minimal (5%) reduction in methane emissions, scientifically proven.
Asparagopsis-based products. (592)	Bromoform, the active compound in Asparagopsis inhibits the last step in rumen methanogenesis. Not approved for use in the US yet.	Methane emission reduction of up to 20-40%.
Feeding highly digestible forages or grain. (592)	Redesign of diet to increase the proportion of highly digestible forages and/or starch. Examples: increase the proportion of corn silage (as opposed to alfalfa or grass silages) and/or increase the proportion of concentrates in the diet. Rumen acidosis and milk fat depression must be avoided.	Reduced methane emission. Effectiveness depends on the magnitude of diet change compared with the baseline. It requires expert input from nutritionist. Diet change may imply land use change, which needs to be accounted for.
Increasing the proportion of lipids in the diet. (592)	Adding the proper balance of lipids can reduce methane production. Rumen acidosis and milk fat depression must be avoided.	Reduced methane emission. Effectiveness depends on the magnitude of diet change compared with the baseline. It requires expert input from nutritionist.

Nitrates (592)	Electron and hydrogen sink, takes hydrogen away from methanogenesis.	Methane emission reduction of up to 10-20%. Extreme caution must be exercised when administering nitrates. Animals should be properly adapted and re-adapted, if nitrate supplementation is temporarily discontinued. Access to molasses blocks with nitrate should be limited to prevent nitrate poisoning. Unwise to use when diets have high crude protein concentrations. Practice requires expert input from nutritionist and veterinarian.
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