



Livestock Enteric Methane Emissions Reduction-Research Program (LEMER-RP)

Application Workshop
July 13, 2023



Funding

- The Budget Act of 2022 amended by (AB 179, Section 194) appropriated a total of \$10 million payable from the Greenhouse Gas Reduction Funds
 - Maximum grant amounts for projects dependent on the selected impact area described in the section [Program Impact Areas](#). However, CDFA may offer an award different than the amount requested.
 - Matching funds are not required but are strongly encouraged.
 - The maximum project term is 46 months.
 - Grant funds cannot be expended before the grant agreement start date or after the grant term end date.



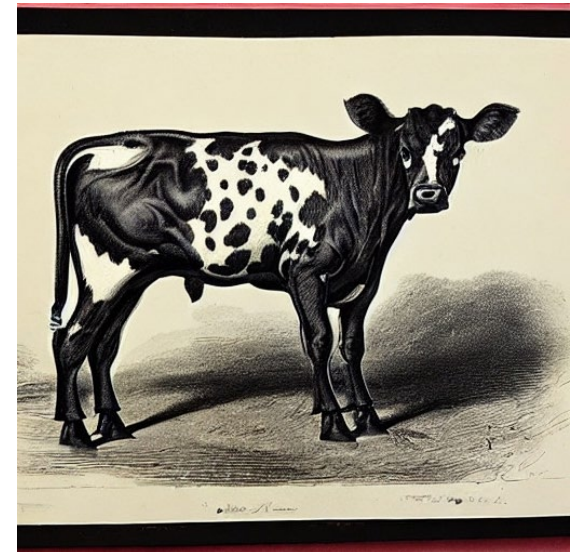
Eligibility

- The California Department of Food and Agriculture's (CDFA) 2023 Livestock Enteric Methane Emission Reduction - Research Program (LEMER-RP) will award competitive grants to Universities (with or without a private partnership), non-profit research organizations, and California Native American Tribes.
 - Private companies are eligible to partner with an entity listed above but are not eligible for the award on their own.
 - California based projects will be prioritized in funding decisions, however, CDFA also welcomes applications from out-of-state organizations that can directly address California's unique dairy and rangeland needs.

Purpose

Goals include the reduction of methane emissions to 40% below 2013 levels by 2030 as codified in [SB 1383 \(Lara, 2016\)](#) as well as efforts to continue advancing climate-smart agriculture. The funding allocated from the Budget Act of 2022 [\(AB 179, Section 194\)](#) will be directed towards the dairy and livestock sectors for demonstration projects to:

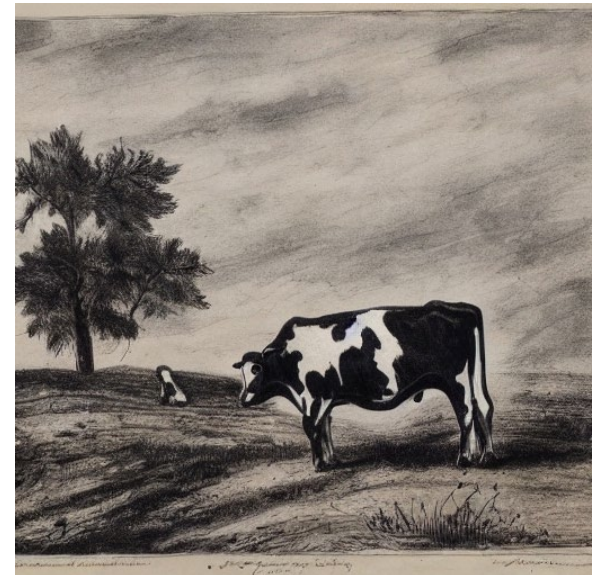
- 1) Supplement feed with additives or ingredients, that have scientifically demonstrated efficacy of reducing methane emissions
- 1) Research dietary modifications that are intended to reduce methane emissions from livestock



Phase 1: Pre-Proposal

During this phase, eligible applicants are required to submit a pre-proposal containing the necessary information. Upon submission, CDFA will provide feedback to the applicants, indicating whether or not they should proceed to Phase 2 by submitting a full proposal. This phase is open to all eligible applicants.

- Pre-Proposal: 3-page limit, 7 questions





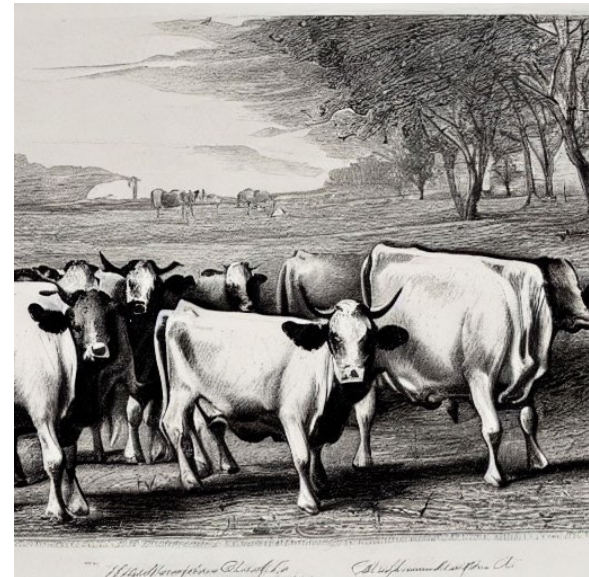
Phase 1: Pre-Proposal Questions

1. Provide a brief overview of the project including scale, livestock sector, and how this project aims to address the funding goals:
 - 1) Supplement feed with additives or ingredients that have scientifically demonstrated efficacy of reducing methane emissions, and/or
 - 2) Research dietary modifications that are intended to reduce methane emissions from livestock.
2. Provide a brief explanation of what impact area(s) your project will focus on and how the project will address that impact area identified. If more than one, please clearly explain how the project will address requirements of each impact area.
3. Explain any unique aspects of the methods or team that will contribute to the success of the proposed work.
4. Address any anticipated challenges/barriers you foresee and how you will overcome them. Please provide detail and a brief timeline if needed on how these challenges will be addressed during the duration of the grant.
5. Provide the award amount requested for the project.
6. Provide any other relevant information for the successful completion of the project.
7. Explain how your project address California's unique dairy and rangeland needs.

How to Submit

- Pre-proposals due August 7, 2023, by 5:00 p.m. PT
 - Please include a primary name, email address and phone number
- Submit proposals by email
at: CDFA.OEFI_Enteric_Methane_Reduction@cdfa.ca.gov
 - No late submissions will be accepted
 - All communications will take place via email or phone

Please email if you have any questions



Timeline

Phase 1	Request for Pre-Proposals (July 6, 2023)  Pre-Proposals Due (August 7, 2023) Recommendation to Phase 2 (September 2023) Notification Letters Sent to Applicants (September 2023)
Phase 2	Full Proposals Due (November 1, 2023) Full Proposals Sent to Technical Reviewers (November) Review and Recommendation to Secretary (December) Awards Announced December 2023 Notification Letters Sent to Applicants (December 2023)
Award Process	Award Process (December 2023 – February 2024) Projects Begin (April 1, 2024) - 46-month project term



Legislative Mandate

"Of the funds appropriated in this item, \$10,000,000 shall be used to (1) provide funding to the dairy and livestock sectors for demonstration projects to supplement feed with additives or ingredients, such as seaweed, that have scientifically demonstrated efficacy of reducing methane emissions and

(2) research dietary modifications that are intended to reduce methane emissions from livestock.

The department may consult with other state and federal agencies, as needed, for the implementation of this funding."



Impact Area 1

- **Impact Area 1** – One project, up to \$2.5 Million:
- Administration of feed additives for one full and/or multiple lactations.
 - Determine the methane reduction efficiency in a variable diet;
 - Economic analysis and GHG reduction impact projection;
 - Upstream and downstream emissions impacts including manure emissions impacts
 - Feed additives for use in this impact area must demonstrate a successful history of use for enteric methane reduction.
- This project must include a plan for attaining federal approval through the U.S. Food and Drug Administration (FDA).

Impact Area 2

- **Impact Area 2** – Two projects, up to \$1.5 million per project.
- Dual intervention studies. Studies investigating two or more interventions.
 - One project to be awarded to a protocol for parallel usage and one for a sequencing protocol. (i.e., 3-NOP and seaweed, 3-NOP and plant extracts, plant extracts and direct-fed microbial, or other combination).



Impact Area 3

- **Impact Area 3** -Two projects, up to \$1.25 million per project.
- For projects focused on cow-calf grazing systems. Studies could include but are not limited to: early life intervention strategies and monitoring, salt lick/bait delivery systems, bolus technology, water delivery or others deliverable or applicable to pasture systems.
 - Multiple trials are encouraged.





Impact Area 4

- **Impact Area 4-** Two projects, up to \$750,000 dollars per project.
- For projects researching dietary modifications that are intended to reduce methane emissions from livestock.
 - Examples include dietary manipulation, such as improving forage quality, altering the proportions of forage in the diet, etc..).

* Please note, that if any of the products are not approved for use or are undergoing a federal approval process and do not have an investigational food use authorization, applicants must acknowledge that end products (i.e., milk and/or meat) will not enter the food supply chain. Livestock feed trials are required for all impact areas.



Evaluation Process

The internal technical review panel consists of subject matter experts who are responsible for the evaluation of submitted pre-proposals.

- 1)The internal technical review panel selects pre-proposals to be developed into full proposals based on alignment with the program's priority impact areas, project concept, scientific merit, impact, methodology, and feasibility.
- 2)CDFA staff notifies applicants of the technical review panel decision and invites selected applicants to submit full proposals.
- 3)Full proposals will be evaluated by a technical review panel (including 2 members of FIAB TASC) and will send its recommendations to CDFA's Secretary for final approval and granting of awards.



Scoring Criteria

<u>Scoring Criteria*</u>	<u>Maximum Points</u>
Q1: How well did applicants describe project overview and their plan to meet funding goals?	8
Q2: How well does project meet and address goals of selected impact area(s)?	8
Q3: How well are project methods explained?	5
Q4: How well did the project address potential challenges/barriers?	3
Q5: Is funding requested appropriate for the proposed project?	3
Q6: How well did applicant provide relevant information for successful completion of project?	3
Q7: How well does your project address California's unique dairy and rangeland needs?	5
Total	35

Resources

- Phase 1 RFP: [2023 LEMER-RP Request for Proposals](#)
- Sign up for email notifications on website – <https://www.cdfa.ca.gov/subscriptions/MailChimp-signup.html>
- This workshop will be posted on website at www.cdfa.ca.gov/oefi/enteric/





THANK YOU!

Questions?

Dana Yount, M.S. (OEFI)

Cathryn McCandless, M.S., DPT (ISD)

Roberta Franco, Ph.D. (OEFI)

Email: CDFA.OEFI_Enterick_Methane_Reduction@cdfa.ca.gov

Website: <https://www.cdfa.ca.gov/oefi/enteric/>