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Supporting Anaerobic Digestion in Communities: Request for Applications

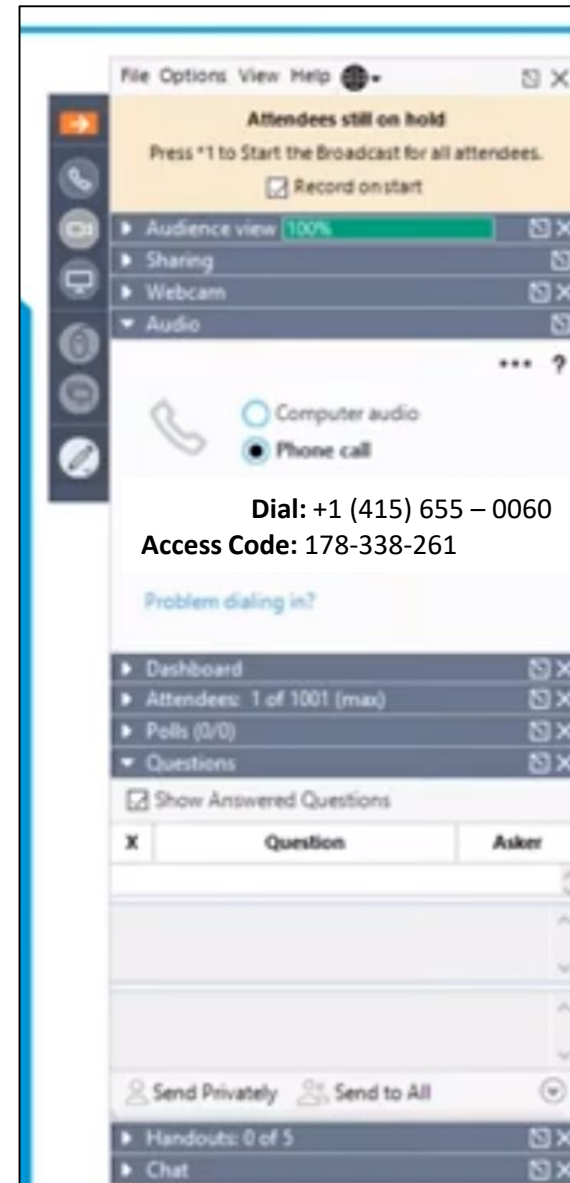
**U.S. Environmental Protection Agency
Office of Resource Conservation and Recovery**

Webinar for Potential Applicants and Interested Stakeholders

June 2, 2020

Webinar Logistics

- **To ask a question:** Type your question in the Questions tab on the right side of your screen. We will take questions at the end of the webinar.
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Agenda

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2. The Sustainable Materials Management (SMM) Program

- SMM
- Sustainable Management of Food
- Anaerobic Digestion
- 10 Keys to Digester Success

3. The Funding Opportunity

- Previous Awardees
- Scope of Work
- Authority
- Eligibility
- Type of work
- Grant Funding

4. Evaluating the Applications

- Threshold Eligibility
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- Narrative Proposal
 - Criteria
 - Tips for Preparing
- Resources

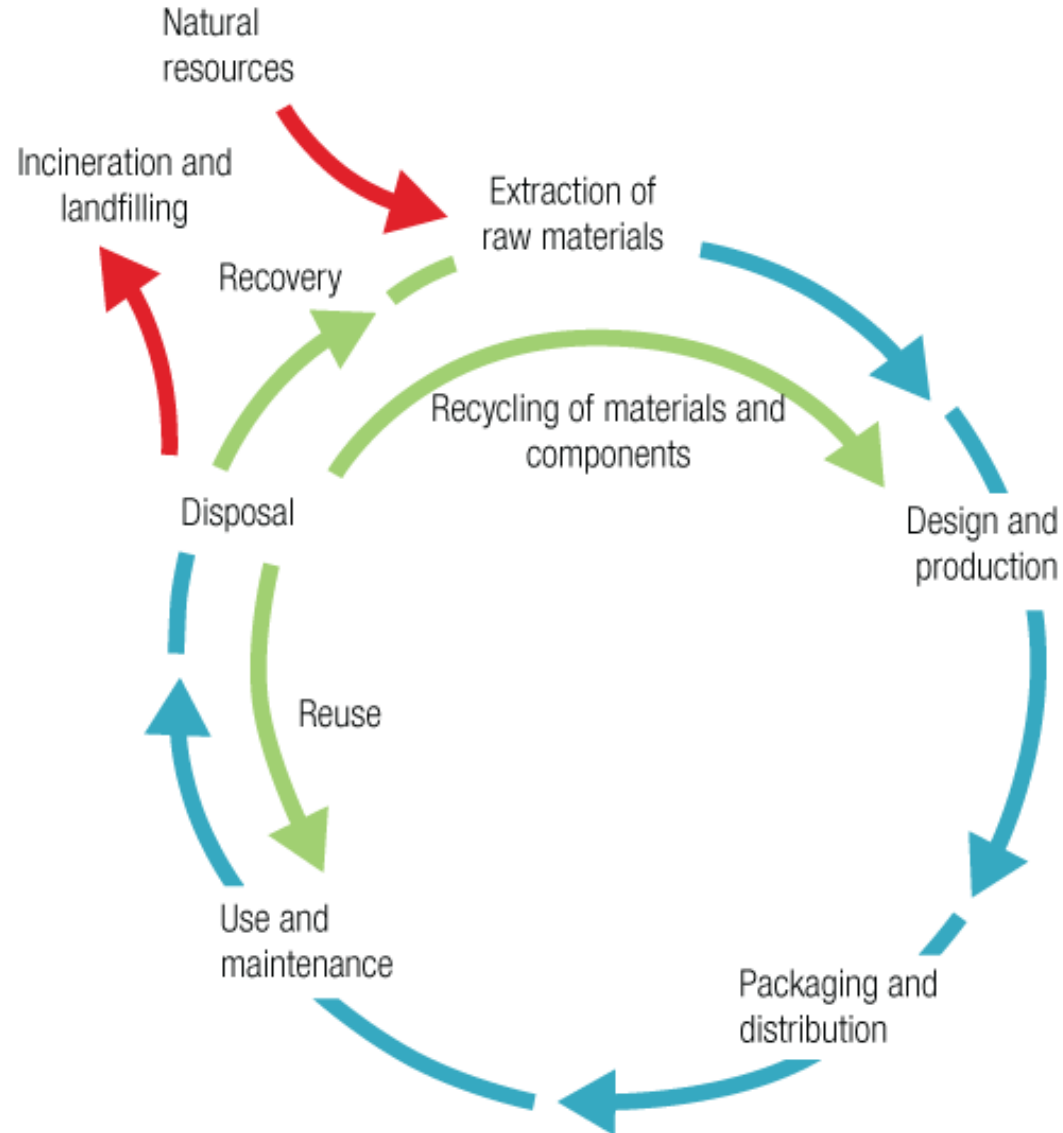
5. Questions & Answers

Goals of the Webinar

- 1. Provide an overview** of the Sustainable Materials Management (SMM) Request for Applications (RFA) for potential applicants and interested stakeholders
- 2. Clarify the information and answer questions** about the application and review process to help potential applicants submit high quality applications for funding consideration

The Sustainable Materials Management (SMM) Program

Sustainable Materials Management (SMM)



“An approach to serving human needs by using/reusing resources productively and sustainably throughout their life cycles, generally minimizing the amount of materials involved and all associated environmental impacts.”

Sustainable Materials Management: The Road Ahead, EPA (2009)

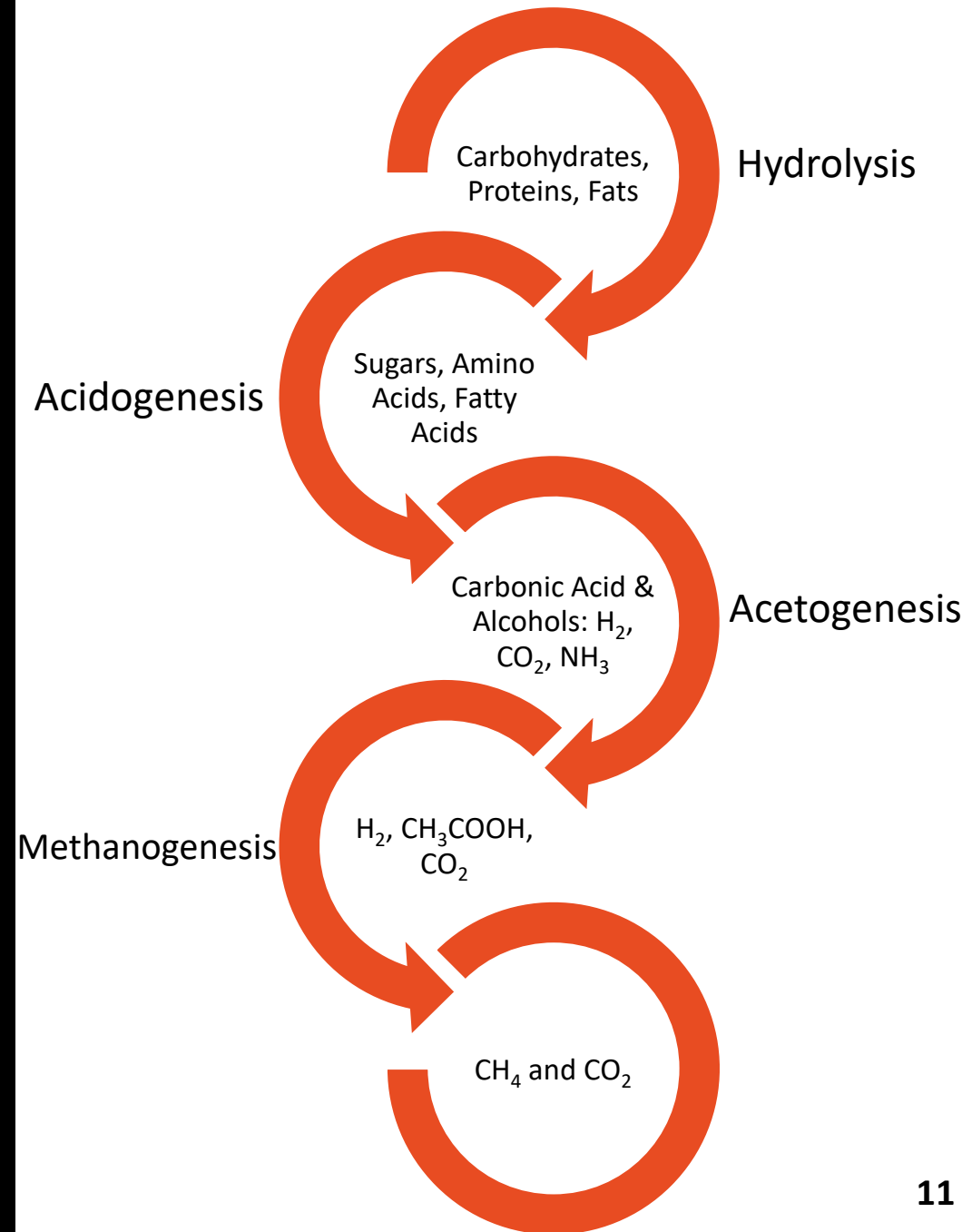


By 2030:

Let's cut the amount of food we waste in half.

Anaerobic Digestion

- Anaerobic digestion is the natural process in which microorganisms break down organic materials. In this instance, “organic” means coming from or made of plants or animals. Anaerobic digestion happens in closed spaces where there is no oxygen.
- During the process - **biogas**, and a solid and liquid **digestate** are generated.





Anaerobic Digestion (continued)

- **Communities and businesses across the country use biogas to:**
 - Power engines, produce mechanical power, heat and/or electricity
 - Fuel boilers and furnaces, heating digesters and other spaces
 - Run alternative-fuel vehicles
 - Supply homes and business through the natural gas pipeline
- **Digestate can be made into products like:**
 - Bedding for livestock
 - Flower pots
 - Soil amendments
 - Fertilizers



10 Keys to Digester Success

1

Plan for success by identifying and defining clear project goals.

2

Recruit and secure an experienced and qualified project team.

3

Develop a sustainable business model to meet financial goals.

4

Secure suitable feedstock supply and evaluate its characteristics.

<https://www.epa.gov/agstar/agstar-project-development-handbook>



10 Keys to Digester Success

5 Use the most appropriate technology to match the type and amount of feedstock.



6 Analyze options for biogas and digestate use.



10 Keys to Digester Success

7

Develop off-take agreements that ensure project revenue.

8

Evaluate added benefits that could be reasons for implementing a project (e.g., odor control).

9

Conduct community outreach and education to obtain project buy-in and approval.

10

Plan to continually optimize operations and maintenance to ensure the biological processes and mechanical equipment are working properly.

<https://www.epa.gov/agstar/agstar-project-development-handbook>

The Funding Opportunity

Previous Funding Opportunity Awardees

City of Madison, Wisconsin

Project Title: Feasibility Study for a Regional Food Waste Digester

Grant Award: \$39,000

Goal: Determine whether a municipally-owned digester can be developed and operated at costs equal to or less than landfill tipping fees using revenues from renewable energy production and compost to offset the capital and operating costs.

Project: Expand upon previous research performed for the City of Madison to include a region-wide model that takes advantage of the County's new RNG offloading station. The expanded study includes a 10 and 20 year financial analysis and a report on the community engagement process.



Compressor at Dane County's new RNG offloading station.
Photo: Amber Arnold, State Journal

Vermont Department of Environmental Conservation

Project Title: Infrastructure to Enable Anaerobic Digestion of Food and Beverage Process Waste

Grant Award: \$43,551

Goal: Solve multiple persistent challenges – lack of waste stream separation and storage capacity, dwindling landfill capacity, overtaxed wastewater systems, underutilized ADs, the need to transition to sustainable energy sources, and insufficient geographic concentration of businesses desiring hauling services to support viable routes.

Project: Design and install side streaming infrastructure for process wastes for collection and transport to local anaerobic digesters.



Crowley Cheese, Plymouth, VT



Foam Brewers Hinesburg, VT

Washington State University's Energy Program

- **Project Title:** Renewable Natural Gas (RNG) Outreach and Education in the Pacific Northwest
- **Grant Award:** \$27,500
- **Goal:** To promote the expansion of renewable natural gas through AD via workshops to find solutions to barriers affecting AD/RNG development
- **Project:** Conduct workshops in Washington state that promote AD projects by WWTPs, food processing companies, MSW agencies, and agriculture producers. The workshops will include market knowledge and innovative approaches to sharing costs in developing AD infrastructure.

Current Funding Opportunity

Scope of Work

- Projects to increase the use of anaerobic digestion (AD) for management of food waste.
- Applications must achieve one or more of the following objectives:
 - Support state, tribal, and/or local government programs that seek to use AD to increase their organic waste diversion rates.
 - Demonstrate solutions and/or approaches for increasing AD utilization that can be replicated by other communities, governments, or other entities; or
 - Establish new or expand existing partnerships (public/private partnerships) that result in the development of AD capacity.



Authority

- In FY 19 & FY 20, **Congress provided EPA with funds** to help public entities demonstrate community AD applications to municipal solid waste streams and farm needs, such as capturing excess phosphorus.
- Projects are awarded under the **general authority of the Solid Waste Disposal Act (SWDA), Section 8001 (42 U.S.C. 6981)**, and must include in the project conducting or promoting the coordination of research, investigations, experiments, training, demonstrations, surveys, public education programs, or studies relating to solid waste.

Eligibility

- **Eligible:**
 - Any of the 50 states, DC, Puerto Rico, Virgin Islands, Guam, American Samoa, and Northern Mariana Islands, local, Tribal, interstate, and intrastate government agencies and instrumentalities.
 - Non-profit organizations, non-profit educational institutions, and non-profit hospitals
- **Not Eligible:**
 - Non-profit organizations that lobby
 - Individuals
 - For-profit organizations

Type of Work

- Projects may include:
 - Feasibility studies
 - Technology and process evaluations
 - Technical assistance, outreach and/or training to model or accelerate solutions
 - Outreach workshops
 - Improvements to the collection or quality of food waste feedstocks
 - Evaluating or developing solutions to barriers that prevent use of AD
 - Expanding processing capacity (equipment, training, improved efficiency)
 - Developing or improving feedstock collection networks

Grant Funding

- The total estimated funding shall not exceed \$3,000,000.
- EPA anticipates awarding 10 to 40 cooperative agreements ranging from \$50,000-\$300,000.
- EPA reserves the right to reject all applications and make no awards.
- The estimated start date for projects is October 1, 2020.
- All project activities must be completed within the negotiated project performance period of two years.

Evaluating the Applications

Threshold Eligibility Criteria

1. Applications must address the mandatory program objectives and elements described in *Section 1.B*, of this announcement.
2. Federal funds requested must not exceed \$300,000. **This excludes any leveraging.** Applications requesting assistance funding in excess of this value will not be considered.
3. Applications must substantially comply with the application submission instructions and requirements set forth in *Section 4.B (Grants.gov Application Submission Instructions)* of this announcement or else they will be rejected. Also, applications with pages in excess of the page limitation will not be reviewed.



Application Materials

- Standard Form 424, Application for Federal Assistance
- Standard Form 424A, Budget Information for Non-Construction Programs
- Narrative Proposal (in template form in Appendix A)
- Budget Table and Narrative (see example in Appendix B)
- EPA Key Contacts Form 5700-54
- EPA Form 4700-4, Pre-award Compliance Review Report

Grant Evaluation

- What will reviewers be looking for in the application?
 - Compliance with threshold eligibility criteria and submission requirements
 - All applicable application materials
 - Scope of work: projects alignment with SMM and national emphasis areas
 - Clear and specific responses to evaluation criteria
 - Please use the template provided when responding (Appendix A)!

Narrative Proposal

- Applications must contain a Narrative Proposal, and Budget Table and Narrative.
- Narrative Proposal
 - maximum of 11 pages in length,
 - **explicitly describe the applicant's proposed project and specifically address each of the evaluation criteria** disclosed in Section 5(A) Evaluation Criteria, and the threshold eligibility criteria in Section 3(C).
- Factual information about your proposed project must be provided. Do not include discussions of broad principles that are not specific to the proposed work or project covered by your application.
 - **Vague descriptions, redundancy, and failure to address each of the evaluation criteria will result in a lower ranking.**
- The Narrative Proposal (Section 5) **must be submitted in the format detailed in Appendix A, Template for Narrative Proposal.**
 - Failure to follow the required format may result in a reduction of up to 5 points under the "Project Summary and Approach" evaluation criterion.

Evaluation Criteria

- Eligible entities whose applications meet the Eligibility Information in *Section 3* of this announcement will be reviewed according to the evaluation criterion set forth in the following slides.
- Each application will be rated under a points system, with a total of 100 points possible.
- Applicants must directly and explicitly address these criteria in the Template for Narrative Proposal (*Appendix A*).
 - **Failure to follow the required template in Appendix A may result in a reduction of up to 5 points under the “Project Summary and Approach” evaluation criterion.**

Criterion 1: Project Summary & Approach

- a. The extent and quality to which the narrative proposal includes a well-conceived strategy for addressing the requirements in:
 - a. Section 1, Part B (Scope of Work),
 - b. Section 1, Part C (EPA Strategic Plan Linkage), and
 - c. Section 1, Part D (Measuring Environmental Results: Anticipated Outcomes and Outputs). **(15 Points)**

- b. The extent and quality to which the narrative proposal sets forth a clear and reasonable time schedule and associated project tasks for achieving the project goals and objectives by project end. **(10 points)**

**Total
Points: 25**

Criterion 2: Env. Results and Performance Measures: Anticipated Outcomes and Outputs

a. Clearly describes how the applicant will measure success in meeting the project's objectives. Clearly specify anticipated environmental outcomes and outputs as described in Section 1, Part D (Measuring Environmental Results: Anticipated Outcomes and Outputs).

(10 points)

b. Describes the plan for achieving project results (including the outcomes and outputs identified in Section 1). ***(5 points)***

c. Describes how the project is transferable to other communities.

(5 points)

**Total
Points: 20**

Criterion 3: Programmatic Capability & Past Performance

- a. Past performance in successfully completing and managing projects. ***(5 points)***
- b. History of meeting the reporting requirements under the assistance agreements described in Section 4 of this announcement. ***(5 points)***
- c. Organizational experience and plan for timely and successful achieving in the objectives of the proposed project. ***(5 points)***

**Total
Points: 15**

Criterion 4: Project Sustainability

- a. Demonstrate its ability to promote and continue efforts to support AD after EPA funding for this project has ended. ***(5 points)***

- b. Describes the extent to which the project supports a state or local mandate, policy, or community priority to remove food waste and organic materials from the municipal waste streams. ***(10 points)***

**Total
Points: 15**

Criterion 5: Effective Partnerships

- a. Describes the partnerships and/or coalition currently in place to support the proposed project and why it is sufficient to complete the proposed project.
- b. Describes the role of each partner on the project and their experience working with the target audience and/or sectors addressed.

**Total
Points: 10**

Criterion 6: Budget & Expenditure of Awarded Grant Funds

- a. Costs are reasonable to accomplish the proposed goals, objectives, and measurable environmental outcomes. **(3 points)**
- b. The proposed budget provides a detailed breakout of the approximate funding used for each major activity. **(4 points)**
- c. Conveys the approach, procedures, and controls for ensuring that awarded grant funds will be expended in a timely and efficient manner. **(3 points)**

**Total
Points: 10**

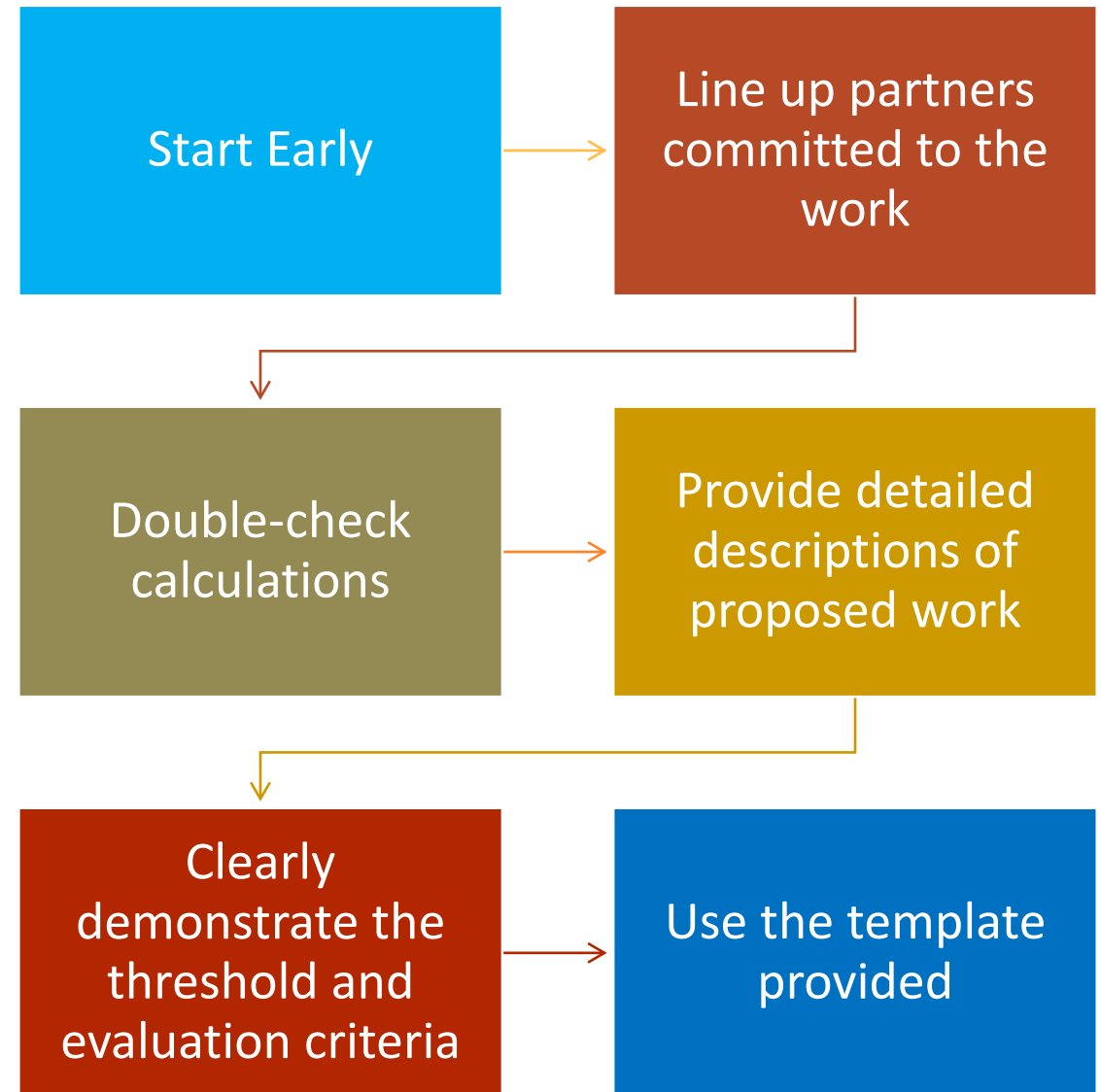
Criterion 7: Voluntary Leveraging

- a. How they will coordinate EPA funding with other federal and/or non-federal sources of resources to leverage additional resources beyond the grant funds awarded to carry out the proposed project.
and/or
- b. That EPA funding will complement activities relevant to the proposed project carried out by the applicant with other sources of funds or resources.

**Total
Points: 5**



Tips for Preparing Applications



Resources

EPA Strategic Plan	epa.gov/planandbudget/strategic-plan
Sustainable Materials Management (SMM) Webpage	epa.gov/smm
Sustainable Management of Food (SMF) Webpage	epa.gov/sustainable-management-food
EPA's Anaerobic Digestion Webpage	epa.gov/anaerobic-digestion
EPA's Office of Grants and Debarment's Recipient Training Requirements and Opportunities	epa.gov/grants/recipient-training-opportunities
EPA's AgSTAR Program	epa.gov/agstar

Please type your questions in the tab on GoToWebinar

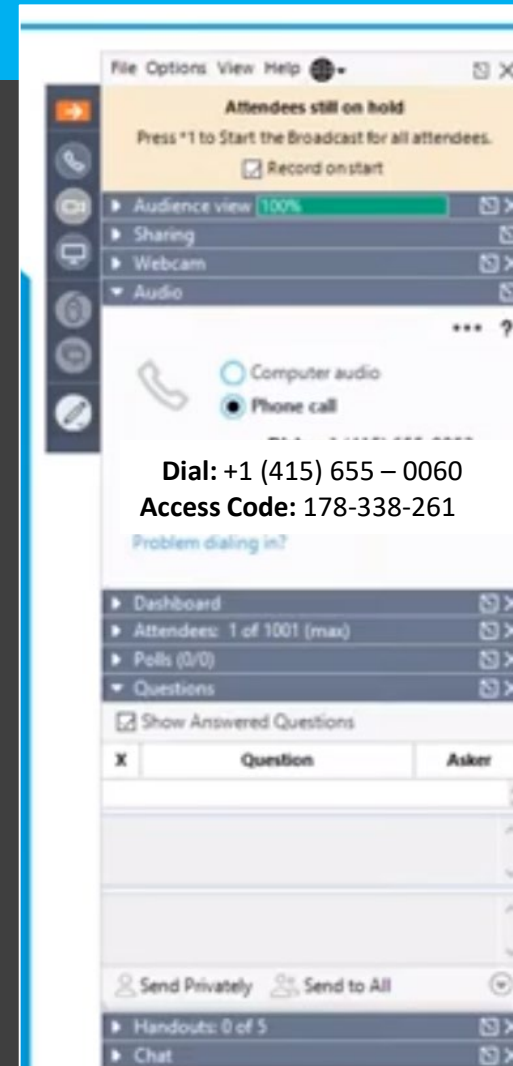
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UPCOMING:

**SMM WEB
ACADEMY**

June 10, 2020

1:00 – 2:30 p.m.

EDT

**Procurement of Recycled-Content
Products:**

**Stimulating Recycling Markets and
Creating Demand**

Register:

<https://www.epa.gov/smm/sustainable-materials-management-web-academy>