GRAHAM SUSTAINABILITY INSTITUTE
UNIVERSITY OF MICHIGAN

Carbon Neutrality Acceleration Program
Request for Proposals from U-M Faculty - Level 2 Grants

Pre-proposal deadline: June 3, 2022
Full proposal deadline (By invitation only): October 3, 2022
Project start date: April 1, 2023

The Graham Sustainability Institute's Carbon Neutrality Acceleration Program offers support for faculty across the University of Michigan (U-M) to pursue innovative and actionable carbon neutrality research. Through novel collaborations across disciplines and with partners poised to advance net zero strategies, we seek to amplify and expand the university's research impact and fuel the breakthroughs needed to combat climate change.

CNAP faculty research grants are a critical component of the program, supporting research, scholarship, and engagement efforts that will create critical knowledge and propel innovations to accelerate the transition to carbon neutrality.[1] While incremental reductions in net emissions are important, **we are most interested in supporting projects that explore and advance big ideas with the potential to substantially accelerate low-carbon transitions.**

Two levels of CNAP grants are being offered—Level 2 grants covered by this request for proposals (RFP) and Level 1 grants addressed in a separate RFP. While the RFPs' goals and objectives are similar, the different funding amounts, project durations, and application processes are intended to meet the needs of projects from different disciplines and at different stages of development. Applicants should match the scale of their project to the appropriate funding level.

Note that interdisciplinary and multi-unit collaboration is *required* for Level 2 grants and *prioritized* for Level 1 grants. A PI may only apply for ONE type of grant this round (Level 1 or Level 2).

Level 1 RFP: http://graham.umich.edu/media/files/CNAP_FY23_RFP_LEVEL_1.pdf

Funding Amount and Project Duration

Level 2 grant awards will range from $100,000 – $200,000 for direct costs over a 2-year project period. We anticipate making 4-6 awards.

Objectives & Research Topics

Level 2 Grants are intended to target interdisciplinary[2] research that has high intellectual value and significant potential for real-world impact. Projects should be innovative and technically sound, and should address the most pressing questions and compelling opportunities related to carbon neutrality.

Eligible Objectives

Proposals must provide an actionable plan to achieve *at least one* of the following eligible objectives.

[1] Carbon neutrality, or net zero carbon emissions, refers to achieving zero net anthropogenic carbon dioxide emissions through a balancing of carbon emissions and carbon removal. The concept can be extended to include all anthropogenic greenhouse gases, which is referred to as climate neutrality or net-zero emissions. We use these terms interchangeably in this RFP.

[2] There is a large body of scholarly literature about the meaning of interdisciplinary, multidisciplinary and trans-disciplinary research. For the purpose of this RFP, we are using the National Academies' definition: "Interdisciplinary research is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice." Committee on Facilitating Interdisciplinary Research, Committee on Science, Engineering, and Public Policy (2004). Facilitating interdisciplinary research. National Academies. Washington: National Academy Press, p.2.

Objective 1: Discrete research efforts - funds for a specific research/scholarship project that explicitly addresses critical issues of carbon neutrality.

Objective 2: Positioning – funds for research efforts that would position PIs/teams to be more competitive for future external funding. PIs/teams should have identified a specific, appropriate funding program/mechanism and be poised to submit a compelling, external proposal at the conclusion of their project.

Research Topics and Characteristics

Projects may span the physical, natural, engineering, and social sciences, as well as arts and humanities, and are open to a wide range of topics, sectors, methods, and geographies. Relevant topics include, but are not limited to, power, financing, transportation, industry, buildings, CDR and CCUS, social/economic transitions and equity, land use, and food/agriculture.

Recognizing that many carbon neutrality issues are inherently interdisciplinary and, in many cases, require a mixture of "bench," field, and social science approaches to advance solutions, Level 2 grants require interdisciplinary collaboration, and projects that integrate technical and social sciences will be prioritized.

Note: Through this call for proposals, the ***Michigan Memorial Phoenix Project*** is providing additional funding to help support interdisciplinary research focused on nuclear energy.

For either objective and any topic:

- the proposed scope of work must be distinct from prior or existing research projects.
- we primarily seek to fund "big ideas"—projects with potential for significant research and real-world impact, whether early-stage or an extension of existing work.
- teams are encouraged to engage with external, non-academic partners (from business, government, communities, non-governmental organizations) to inform the research ideas, in the conduct of the research, to put research ideas into practice, and/or as part of the findings dissemination.
- Both initial collaborative projects with high synergistic value or an established team's "next level" research are eligible.

Additionally, each proposal team should clearly articulate both:

- The pathways through which the research findings are likely to lead to actionable solutions, and
- the potential scale of impact on net emissions reductions (more details below).

Eligibility

Proposed projects must be led by a U-M researcher or faculty member from the Ann Arbor, Dearborn or Flint campus who is eligible to serve as a U-M Principal Investigator (PI).[3] **Teams must including investigators from distinct disciplines and multiple U-M academic and/or research units.**[4] Prioritized projects will include those that span technical and social sciences and those that substantively include junior faculty on the PI leadership team.

[3] The definition of a U-M PI can be found at http://orsp.umich.edu/principal-investigator-pi.

[4] Teams must include representation of at least two disciplines AND at least two U-M academic units (U-M faculty handbook, U-M Dearborn colleges, U-M Flint academic units) or research units (OVPR research units and Office of the Provost institutes and centers) among the U-M PIs and Co-Is. The disciplinary and unit requirements are distinct. Teams with investigators from different campuses are encouraged.

A PI may only apply for ONE type of grant offered this round (Level 1 or Level 2). An individual may be listed as a PI on only one proposal, but may be listed as a Co-I on other proposals of either type. There is no limit to the number of proposals on which an individual may be listed as a Co-I. PIs on active CNAP grants are not eligible to apply as PIs this round.

Collaborators from other academic institutions are permitted, but no more than 10% of the project budget may be directed to other academic or research institutions. There is no limit on support for non-academic partners/collaborators on engagement-focused projects.

Proposal Submission Process

The two-stage application process (pre-proposal and full proposal by invitation) is intended to identify projects best aligned with the funding goals and to direct internal resources where they will have the greatest impact. It also offers advancing teams time and feedback to refine and strengthen proposal details.

Potential applicants should review the RFP and follow directions to submit a pre-proposal by June 3, 2022. The pre-proposal is **mandatory** and will be used to determine which applicants are invited to submit full proposals. Applicants will receive feedback on their pre-proposals when notified whether they are invited to submit a full proposal. We anticipate inviting approximately 10 teams to advance. Full proposals must be submitted by October 3, 2022. Teams will have an opportunity to respond in writing to written reviews of the full proposal before the review panel reconvenes to make a final funding recommendation. All applicants will receive feedback on their proposals along with the funding notifications.

All applications must be submitted through the online submission form accessible through the Graham website.

Key Dates

Date	Activity
June 3, 2022	Pre-proposals due
Early August 2022	Invitations to submit a full proposal
October 3, 2022	Full proposal due
Mid-November 2022	Applicant response to written reviews (optional; 1-2 weeks)
February 2023	Funding notifications
April 1, 2023	Anticipated project start date

Supporting Documents

All supporting documents can be found at the grant opportunity webpage:
www.graham.umich.edu/carbonneutrality/grants

Pre-Proposal Guidelines

Applicants are required to submit a pre-proposal by 11:59 p.m. ET on Friday, June 3, 2022.

Pre-proposals must be provided as a single PDF file using 12-point Times New Roman font, with no less than single spacing and one-inch margins, and organized using the headers below. Pre-proposals must include a title page, 5-page maximum narrative, and appendices as outlined below.

At the pre-proposal stage, applicants are encouraged to focus on the societal and research significance of the carbon neutrality issue being addressed, the value and innovation of the interdisciplinary

approach, and potential application of the work, while providing enough methodological details to demonstrate the proposed outputs are sound and feasible. At the full proposal stage, the review process will focus more heavily on the details of the proposed methods, feasibility, and potential impact.

Pre-Proposal Title Page

1. *Project Title*
2. *Principal Investigator* – Name and contact information
3. *Additional Team Members* (anyone receiving project resources or contributing significant resources to the project) – Names and institutions. Team members may be added or removed at the full proposal stage, but the PI should remain the same.
4. *RFP Objective(s)* – Indicate the RFP objective(s) the proposed work will address.
5. *Estimated Budget Request* – Requested dollar amount. Proposals may request up to $200,000 over a period up to 24 months. Expected range $100,000 - $200,000. Note: If invited to submit a full proposal, a detailed budget and budget narrative will be required; the total request in the detailed full proposal budget may not exceed this pre-proposal budget estimate.
6. *Project Duration* – Projects should start April 1, 2023 and end no later than March 31, 2025.
7. *Project Summary* – Provide a 250-word summary suitable for a non-technical audience that describes the project's objectives, planned outputs, and anticipated outcomes. The project's relevance for hastening a low-carbon transition and research significance should be clear.

Pre-Proposal Narrative (5 page maximum)

The pre-proposal narrative should not exceed 5 pages (including figures and tables, excluding appendices) and should be organized using the following headings. Approximate suggested page lengths are provided. The narrative should be written in a way that will be compelling to a diverse set of reviewers, including individuals with expertise in natural and social sciences.

1. *Problem Statement & Project Objective (~1.5 pages)*
    a. Introduce the carbon neutrality barrier or opportunity the project proposes to address, discussing both the importance of the issue to society and research significance. For projects that include engagement with external (non-academic) partners/end users of the research, identify the specific partner(s) and their connection to the topic.
    b. Specify the RFP objective(s) you seek to achieve. Explain how the proposed work is new with high synergistic value/promise or a distinct, innovative advancement of existing research.
    c. Briefly describe the existing expertise, activities, and/or prior university investment the project builds on and the need for internal funding to support the work. Both new and existing efforts are valued; this background is helpful in demonstrating need and whether the effort represents a significant, rather than incremental, advancement.
2. *Approach (~0.75 page)* – Describe how the team will implement the proposed activities. List the core research question(s). Provide a general description of the technical approach, making clear how the approach is interdisciplinary and novel/innovative, and how it will lead to the planned outputs. For engagement projects, briefly indicate how collaboration with partners informs the research process.
3. *Outputs and Outcomes (~0.75 page)*
    a. Provide a list of the planned outputs and anticipated outcomes, clearly distinguishing between the two. Describe these briefly, clearly stating how the outputs address the issue

described in the problem statement and will help lead to the anticipated outcome(s). Refer to the guidance at the end for definitions and examples.

   b. For positioning projects, this should identify the specific funding opportunity(ies) that will be pursued and explain how the proposed activities will contribute to the development of a more competitive proposal to outside sponsors.

4. *Pathways to Impact (~0.5 page)*
   a. Articulate the pathways through which the research findings would ultimately lead to solutions (e.g., through private markets–products and innovations; policies–rules, laws, programs, management practices; individual behavior change).
   b. Articulate the potential significance/magnitude of the ultimate impact associated with the work (e.g., quantitative estimates of avoided or captured carbon, description of transferability or scalability, importance for a critical sector or population, etc.).
5. *Team (~0.5 page)* – Explain how the team is well qualified to implement the project, including how the collaborative effort will be stronger than the sum of disciplinary parts and maximize the potential impact of the work.
6. *Budget Estimate* – Provide a figure only for the estimated total budget for the project. The total request in the full proposal detailed budget may not exceed the budget estimate in the pre-proposal.

Pre-Proposal Appendices

1. *References* – Up to 2 pages of references
2. *CVs/Resumes* – Provide two-page CVs or resumes for PIs, Co-Is, and senior project personnel.
3. *Current and Pending Support* – Provide information on all current and pending support for ongoing projects and proposals. Please utilize a format acceptable to NSF, DOE or the provided template.
4. *Reviewers* – Provide a list of 3-4 qualified and non-conflicted technical reviewers (internal or external to U-M) who could review your project if invited to submit a full proposal. You may also list up to 4 people you would prefer not to review your project if invited to submit a full proposal and indicate why. Whether or not these suggestions will be used is at the discretion of program staff. Teams invited to advance may provide an updated list in the full proposal.

To submit a pre-proposal, access the application page by clicking the "Apply for a Level 2 Grant"" button on www.graham.umich.edu/carbonneutrality/grants then click "Apply." Once you have logged in, enter the team information into the online form, upload your preproposal as a single PDF, and save your application. You will receive a single confirmation email when you have successfully saved your pre-proposal. You may continue to edit your pre-proposal application by updating the form fields and uploading revised PDFs until the deadline, at which point your application will be submitted automatically. **If you do not receive a confirmation email, your pre-proposal was not saved properly and you should resave or contact us directly at graham-cnap@umich.edu.** Your pre-proposal confirmation email will include a unique URL specific to your application. **Save this email – you will need this URL and login credentials to access your application to make pre-proposal edits and submit a full proposal, if invited.**

Pre-proposal Review Process & Evaluation Criteria

Pre-proposals will be reviewed by a multidisciplinary and multisector review panel according to the criteria listed below. Panelists will convene to discuss strengths and weaknesses and any discrepancies among the reviews and identify the top pre-proposals to advance in the competition.

Pre-proposal Evaluation Criteria

1. *Research significance* – The overall significance and scientific merit of the work, including the extent to which the project will address an important problem or a critical barrier to progress in the field and enhance the scholarly distinction of the university.
2. *Approach and Interdisciplinarity* – The extent to which the application provides:
    a. a specific research question and a reasonable research process likely to produce the planned outputs, and
    b. evidence of the research team's ability to work together in an interdisciplinary fashion and the likelihood that the proposed interdisciplinary approach will yield new insights into the problem being addressed.
3. *Team* – Degree to which the team is composed of a diverse multidisciplinary group of scientists with the appropriate expertise and experience to implement the proposed scope of work.
4. *Potential Impact* – The potential real-world impact of the approach or issue in advancing carbon neutrality, including: the extent to which the proposed process and outputs are feasible and likely to lead to the identified outcomes, clarity and reasonableness of the pathways to application, the magnitude/significance of the ultimate impact, and for engaged projects, the alignment of research plans and partners' interests.

Proposal Guidelines

Applicants must have submitted a pre-proposal and been invited to submit a full proposal. Proposals must be submitted by 11:59pm ET on October 3, 2022.

Proposals (cover sheet, project narrative, and appendices) must be submitted as a single PDF file using 12-point Times New Roman font, with no less than single spacing and one-inch margins, and organized using the headers below. Except where noted, proposals should use clear writing appropriate for non-specialists and make a strong case for the importance of the project to reviewers outside the discipline.

Cover Sheet

1. *Project title*
2. *Principal investigator* (primary contact for project) – Name, title/position, U-M unit, telephone, mailing address, and email address
3. *Additional team members* – Name, title, and institution/organization
4. *RFP Objective(s)* – Indicate the RFP objective(s) the proposed work will address.
5. *Budget request* – Proposals may request up to $200,000 total over two years. Note: This budget request may not exceed the pre-proposal budget estimate.
6. *Project duration* – Projects should start no earlier than April 1, 2023 and end no later than March 31, 2025.
7. *Project summary* – Provide a 250-word summary suitable for a non-technical audience that describes the project's objectives, planned outputs, and anticipated outcomes. The project's relevance for hastening a low-carbon transition and research significance should be clear.

Project Narrative

Narratives should not exceed 9 pages (including figures and tables, excluding appendices) and should be organized using the following headings. Approximate suggested page lengths are provided.

1. *Problem Statement & Project Objective (~1.5-2 pages)*
    a. Introduce the carbon neutrality barrier or opportunity the project proposes to address, discussing both the importance of the issue to society and research significance.
    b. Specify the RFP objective(s) you seek to achieve. Explain how the proposed work is new with high synergistic value/promise or a distinct, innovative advancement of existing research.
    c. Briefly describe the existing expertise, activities, and/or prior university investment the project builds on and the need for internal funding to support the work. Both new and existing efforts are valued; this background is helpful in demonstrating need and whether the effort represents a significant, rather than incremental, advancement.
    d. For engagement projects, clearly identify the project's primary partner(s), their connection to the topic, their current information needs, and how their input helped to shape the project. This should be corroborated by letters of support from partners in the appendix.
2. *Approach (~4 pages)* – Describe the proposed activities to address the research questions and ensure effective coordination of project team members. Technical language suitable for experts in the sub-area of the research is appropriate. Using an organizational structure that best suits the proposal topic and language consistent with the activities/outputs listed on the timeline in the appendix, be sure to:
    a. Clearly identify the project's core research question(s).
    b. Describe the research design/methods. Make it clear how the proposed methods are interdisciplinary and novel/innovative and how they will lead to the planned outputs. Include plans for dissemination, if applicable.
    c. Describe the adaptive mechanisms the team will use to promote collaborative interactions that enable new knowledge and creative approaches and ensure effective project management.
    d. Address potential problems and alternative strategies.
    e. Describe how the team will evaluate the implementation and outcomes of the project, including clear and appropriate measures of success. Refer to the guidance at the end of this document for additional details.
    f. Clearly state opportunities for U-M students.
    g. For engagement projects, this section should describe the collaborative process that will be followed to ensure iterative engagement with the partner(s) and coordination among team members, including when and how collaboration with partners connects to specific research tasks and informs the research process.
3. *Outputs and Outcomes (~0.75 page)*
    a. Provide a list of the planned outputs and anticipated outcomes, clearly distinguishing between the two. Describe these briefly, clearly stating how the outputs address the issue described in the problem statement and will help lead to the anticipated outcome(s). Refer to the guidance at the end for definitions and examples.

b. For positioning projects, the description should explain how the proposed activities will contribute to the development of a more competitive proposal to outside sponsors. Identify specific funders, how the proposed research topic fits with their priorities, and a timeline for submission.

c. For engagement projects, be clear how partners anticipate applying project findings and using outputs in their work.

4. *Pathways to Impact (~0.75 page)*

   a. Articulate the pathways through which the research findings would ultimately lead to solutions (e.g., through private markets–products and innovations; policies–rules, laws, programs, management practices; individual behavior change). What factors may facilitate or inhibit the transmission of your research discoveries into action? Describe the ways in which the pathways and barriers have been taken into account in the approach and/or outputs in order to enhance or expedite impact.

   b. Articulate the potential significance/magnitude of the ultimate impact associated with the work (e.g., quantitative estimates of avoided or captured carbon, description of transferability or scalability, importance for a critical sector or population, etc.).

   c. Describe the equity impacts of the work and how the project will benefit historically underserved people and communities.

5. *Team (~0.5 page)* – Explain how the team is well qualified to implement the project, including how the collaborative effort will be stronger than the sum of disciplinary parts and maximize the potential impact of the work. Identify the role(s)/contribution(s) of the team members; a table may be useful.

Appendices

1. *References (up to 2 pages)*
2. *Graham proposal approval form (PAF)* – Complete the Graham PAF available on the grant opportunity webpage. **This is different from the PAF routed through the U-M eResearch Proposal Management (eRPM) system**. **Signatures of the department/unit head and the dean or director of the college/school/unit are required.** Please allow time to route this form for signatures according to the policies and procedures in your campus unit.
3. *Timeline* – Using the timeline template identify start and end dates for the proposed work and list significant tasks and outputs, connecting directly to those identified in the narrative. Projects should start no earlier than April 1, 2023 and be completed no later than March 31, 2025.
4. *Budget and budget narrative* – Provide an itemized budget for the overall project using the budget template found on the grant opportunity webpage. The budget may not exceed $200,000. Funds may be used to support normal research expenditures. Equipment purchases over $5,000 and indirect costs are not allowed. **PIs are encouraged to consider the unique requirements and levels of available funding associated with different units and disciplines.** PIs should articulate the specific activities for which the grant funds would be used as distinct from activities supported by other current funding sources. The budget narrative should justify expenses in all budget categories. Personnel costs must be broken out by individual and include number of months and percentage of time requested. For any subcontracts, include a separate budget using the same budget template and a separate narrative including the same detail as the overall budget.

5. *Current and pending support* – Provide information on all current and pending support for ongoing projects and proposals for all investigators on the team. Please utilize a format acceptable to NSF, DOE or the provided template.
6. *Letters of support (if applicable)* – Provide letters from individuals and/or partners confirming contributions to and support for the project. Specifically, letters are required for a) team members or partners providing in-kind contribution of personnel time that is not funded in the budget, b) individuals, groups, and/or institutions providing data/access to data or other resources necessary for the project not otherwise accounted for in the budget, and c) primary partners in engagement projects.
7. *Resumes* – Include a brief (2-page) CV for PIs, Co-Is, and senior project personnel.
8. *Reviewers* – Include an updated list of 3-4 qualified technical reviewers, internal or external to U-M, who could review the proposal. You may also list up to 4 persons you would prefer not review your project and indicate why. Whether or not these suggestions will be used is at the discretion of the program staff.
9. *Other supporting documents (optional, 3 pages maximum)*

How to Submit Your Proposal

Your full proposal must be uploaded to your original application (the one you started at the pre-proposal phase). To submit your full proposal, you will need to log in to your account (using the same credentials as the pre-proposal phase) by following this link: https://graham.umich.edu/user. After logging in, you can edit your application by following the unique application URL.

Once logged in, you will need to do the following: 1) Review and update the fields in the online application form as needed (e.g., team members, budget); 2) Expand the "Project Information" section to access the full proposal upload field and then upload your proposal as a single PDF; 3) Click the "save" button.

You will receive a confirmation email the first time you successfully upload and save your proposal. The email will include a link you may use to return to your application and make edits until the deadline, at which time your saved application will be automatically submitted. You will not receive a second confirmation email at that time. **If you do not receive a confirmation email, your proposal was not saved properly and you should resave or contact us directly at graham-cnap@umich.edu.**

Full Proposal Review Process & Evaluation Criteria

The review process for full proposals is as follows.

1. *Written reviews* – Full proposals meeting the minimum requirements will be reviewed by panel members from the pre-proposal stage and additional experts internal and external to U-M with knowledge of the research areas.
2. *Applicant response to reviews (optional)* – Applicants will receive their written reviews and be given the option to provide a response (two-page maximum).
3. *Full proposal panel review* – The review panel will reconvene to discuss the outcomes of the written reviews and applicant responses and to make a rank-order recommendation for funding.
4. *Award selection* – Final awards will be determined based on the panel's assessment of the proposals in accordance with the evaluation criteria, and additional program goals and considerations including: available funding; fostering collaborations among U-M faculty and stakeholders; seeking diversity in myriad forms; and providing meaningful opportunities for U-M students.

Full Proposal Evaluation Criteria

1. *Research significance* – The overall significance and scientific merit of the work, including the extent to which the project will address an important problem or a critical barrier to progress in the field and enhance the scholarly distinction of the university.
2. *Approach* – The extent to which:
   a. the overall strategy, methodology and analyses are well-reasoned, well-organized, sufficiently-detailed, and appropriate;
   b. the proposal demonstrates access to and/or availability of necessary resources, including data; and
   c. the proposal addresses potential problems and alternative strategies and incorporates a mechanism to assess success.
3. *Interdisciplinarity* – The extent to which the application provides evidence of the ability of the team of investigators to work together in an interdisciplinary fashion, including mechanisms the team will use to promote collaborative interactions that enable new knowledge and creative approaches, and the likelihood that the proposed interdisciplinary approach will yield new insights into the problem being addressed.
4. *Feasibility, Budget & Sustainability*
   a. The extent to which the application demonstrates that measurable results are achievable within the project period and proposed budget;
   b. The extent to which the proposed project costs are necessary and reasonable; and
   c. In the case of positioning proposals, the potential for the award to provide a basis for further research support from external sponsors.
5. *Potential Impact* – The potential real-world impact of the approach or issue in advancing carbon neutrality, including:
   a. the extent to which the proposed process and outputs are feasible and likely to lead to the identified outcomes,
   b. clarity and reasonableness of the pathways to application, and
   c. the magnitude/significance of the ultimate impact.

Proprietary Information & Intellectual Property

Applicants should be aware that the disclosure of patentable ideas, trade secrets, and privileged, confidential, commercial, or financial information can hinder an applicant's chances to secure patents, trademarks, or copyrights.

Proprietary information of this kind should only be included in proposals when it is necessary to convey an understanding of the proposed project. Applicants must mark proprietary information clearly in the proposal with appropriate labels, such as, "The following is (proprietary or confidential) information that (proposing entity) requests not be released to persons outside the Graham Sustainability Institute, except for purposes of review and evaluation."

Please protect your intellectual property rights at the proposal preparation stage as appropriate. This will allow you to speak freely about ideas and avoid the inadvertent loss of intellectual property rights. Contact Innovation Partnerships to determine the best way to protect your intellectual property.

Additional Project Support

All awardees will receive additional support from the Graham Sustainability Institute during the project period. Check-ins with Graham staff will identify roadblocks, facilitate solutions, and connect teams with additional resources, including other funded teams. In addition, Graham staff will assist teams in

developing translational materials and leveraging relevant university communications resources to support knowledge dissemination and impact.

Diversity, Equity & Inclusion

At the Graham Sustainability Institute, our dedication to academic excellence for the public good is inseparable from our commitment to diversity, equity, and inclusion. Our mission of engaging, empowering, and supporting faculty, staff and students to foster sustainability solutions includes ensuring that each member of our community thrives. We believe that diversity, equity, and inclusion are key to empowerment, and the advancement of sustainability knowledge, learning, and leadership.

Questions and Program Contact

Question and Answer Record: Responses to all questions, without reference to project specifics, will be posted on a rolling basis for all interested applicants to view on the grant opportunity webpage: www.graham.umich.edu/carbonneutrality/grants

Email & Phone: Questions should be submitted to graham-cnap@umich.edu or directed to Maggie Allan at maallan@umich.edu or 775-293-0134 (Cell).

Guidance & Definitions

Project outputs are specific products created or services delivered during or upon project completion; there may be several associated with a project. Example outputs include, but are not limited to: scientifically produced datasets and analyses; a refined research question informed by preliminary data collection and stakeholder collaboration; publications, presentations or other scholarly work; a grant proposal for (or a detailed and actionable strategy for pursuing) continued funding; and translational services and products that support dissemination of findings and/or decision-making such as workshops, white papers, guides, briefs, op-eds, factsheets, social media, or local media engagement.

Project outcomes are the expected impacts of the project process and outputs; there may be several outcomes associated with a project. Outcomes can occur over the short- or long-term. They include how the work will change or influence knowledge, behavior, practices, procedures, or policy to advance carbon neutrality. Proposed project outcomes should clearly follow from the proposed activities and outputs (longer-term, ultimate outcomes/impacts should be described in the "Pathways to Application" section) and should include at least some of the following: advancements in understanding; new or strengthened collaborative relationships; maximized faculty competitiveness for external funding through clear and actionable plans to pursue funding; additional capacity among external partners to advance carbon neutrality.

Evaluation helps teams improve their project, communicate results, and inform future work. Proposals should describe plans to assess both project implementation (extent to which the project is functioning as planned, what and how much was accomplished, identified major challenges and successful strategies) and outcomes (including unintended effects). Proposals should identify which aspects of implementation and outcomes will be assessed, the method(s) for answering those questions, and clear and appropriate measures of success. Recognizing that project evaluation efforts and reporting will be completed during the project period, a focus on outputs and short-term outcomes is expected. Applicants are strongly encouraged to include a formative evaluation or feedback component during the project to allow adjustments to improve the project design and implementation.