



Special Projects Competition Understanding Energy Transitions and Coastal Resilience in the Non-Contiguous U.S.

SPECIAL PROJECTS "E" ANNOUNCEMENT

Competition:

FY 2023 Understanding Energy Transitions and Coastal Resilience in the Non-Contiguous areas of the U.S.

Closing Dates and Deadlines:

March 2, 2023 at 11:59 PM Eastern Time

Eligible Sea Grant Programs:

This competition is open to Sea Grant programs in the Non-Contiguous U.S. (Alaska, Hawaii, Puerto Rico, and Guam). All projects must take place within the United States or territories or their respective waterways.

Award Time Frame:

The proposed start date should be no earlier than June 1, 2023, with projects to be completed no later than two years after the project start date. The project end date should be no later than December 21, 2025.

Funding Availability:

The National Sea Grant Office (NSGO), in partnership with U.S. Department of Energy's Water Power Technologies Office (WPTO), anticipates that up to \$800,000 in FY 2023 federal funds will be available to individual Sea Grant programs to support up to six projects to how energy transitions are considered in coastal resilience efforts in hyperlocal (small cities and towns in remote, rural, and island geographies) contexts. Projects will conduct extension activities to assist communities in effectively engaging with emerging energy technologies in order to secure a sustainable, resilient, and equitable future. Extension activities will help illuminate community values, perceptions, and cultural contexts around energy innovation. Deliverables will be submitted to managing agencies for review; results will be used to inform social science and technology research and development.

The NSGO expects to fund up to six awards, and each application should be no more than \$400,000 and total funding will not exceed \$800,000 for this opportunity. Applications do not require matching funds.

Project Description:

In partnership with the U.S. Department of Energy's WPTO, the NSGO will award extension programs within Alaska, Puerto Rico, Hawaii, and Guam Sea Grant programs to support projects that focus on how energy transitions are considered in coastal resilience efforts in hyperlocal (small cities and towns in remote, rural, and island geographies) contexts. Proposals will ideally assist communities effectively engage with emerging energy technologies intended to secure a sustainable, resilient, and equitable future.

- 1) Proposals must be focused on how extension efforts can support and learn from communities engaging in energy conversations: Islands and remote communities in the United States often have expensive, unreliable energy systems, leaving them vulnerable and dependent on volatile energy supplies, high fuel and electricity costs, and frequent power disruptions. These locations are also uniquely exposed during natural disasters and disproportionately impacted by climate change. It is therefore critical to support these communities as they engage in the process of identifying, planning, and developing the local clean energy resources that meet their long-term needs.
 - NSGO and WPTO are seeking projects that support the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystems. Remote and island communities, areas hit hard by natural disasters and climate change impacts, and ocean researchers can benefit from ocean renewable energy.
- 2) Proposals must engage directly with coastal communities to understand the solution space for energy innovation in the context of community needs and priorities: This call seeks projects that will explore interdisciplinary collaboration to understand community values, perceptions, and cultural contexts around energy innovation and broad areas of resilience. Extension work is necessary to responsibly engage with communities, understand community motivations, and make results rapidly accessible. Sea Grant programs have developed a deep understanding of many of the priorities and needs within their local and regional communities—this is a key gap across the Department of Energy as it intersects with coastal communities and local energy systems. It is expected that extension work will balance local needs identified by partner Sea Grant programs with existing Department of Energy priorities, investments, and programs, such as the Energy Transitions Initiative Partnership Program (ETIPP), Powering the Blue Economy, or other community-centered efforts.
- 3) Proposals must include ocean energy (wave, tidal, current, OTEC, and salinity gradients) within an approach to energy innovation and development: Energy is a cross-cutting topic that can influence many of the existing focal areas within Sea Grant programs. For instance, energy resilience is inextricably tied to coastal resilience efforts, both in climate mitigation, community adaptation, hazard mitigation, and disaster preparedness and recovery. Sustainable fisheries or aquaculture work could be benefited by exploring integration options with novel energy technologies innovation, which also increases workforce development opportunities as new collaborations develop. DOE believes that providing extension services within regional communities offers a unique opportunity to understand how communities learn about, value, adopt, and make decisions around energy innovation and energy planning. This type of stakeholder-centered support helps provide more models for how to engage in energy planning with an opportunity-oriented, instead of conflict-oriented, framework.

In many ways, the relationship communities have with energy and energy services—from generation, transmission and distribution, management and operational systems, and specific end-uses enabling essential economic activities—is dynamic and evolves over time as priorities shift and change. WPTO is concerned with understanding how communities engage in navigating the complex conversations around meeting their current and future energy needs. Energy conversations occurring in communities ideally reflect community needs rather than advancing specific technologies, but proposals should encourage communities to view the ocean as an energy asset with diverse possibility.

Successful proposals might tackle many issues related to energy, including (but not limited to): generation and distribution; aspects of end services and long-term infrastructure change, such as vessel electrification or decentralized and local infrastructure' heating and cooling; or desalination and aquaculture. Proposals should consider marine energy as part of a potential energy future (whether a primary generation technology, part of a hybrid system, or an option within a community portfolio that utilizes multiple sources of energy generation).

4) Proposals must include quarterly communication with WPTO: This competition intends that funded projects will share findings and outcomes to NSGO and WPTO for review and use. WPTO believes that there are strong advantages to placing communities at the center of technology advancements efforts, and therefore considers the results of the potential projects in this call to be critical to helping inform DOE programmatic efforts that catalyze energy system innovation. Proposals must include a quarterly virtual video call with WPTO. These are not intended to manage the extension work—through these conversations, WPTO seeks to glean "on the ground" information about energy transitions and, on request, offer connection to energy expertise. Additional coordination with DOE may include collaboration with DOE National Laboratories; regional DOE programs (such as ETIPP and Energy Storage for Social Equity); and other public, private, or NGO regional organizations involved in energy system innovation and planning. Proposals connecting with or building off existing WPTO equities are highly encouraged.

The following areas are of specific interest:

- a) Inform research to understand current and evolving community values, perceptions, and cultural contexts around energy innovation and broad areas of coastal resilience.
- b) Engage in outreach and dialogue with communities seeking knowledge building around clean energy solutions and the role energy can play in resilience, blue economy, and community futures.
- c) Develop understanding of existing local/regional resources, information networks, and stakeholders (including industry, academia, and NGOs).
- d) While developing an understanding of how communities approach energy innovation, provide aid to communities engaging in strategic energy planning through assistance identifying tools, technical expertise, and/or solutions by working alongside DOE sponsor organizations
- e) Create a support and information network between other programs and DOE that allows for greater knowledge of and access to pre-existing technical support programs and assets (laboratories, programs, expertise, etc.).
- f) Seek to advance the integration of energy planning and innovation within coastal resilience efforts and/or hazard mitigation.

g) Engage in collaborative efforts in energy planning and innovation efforts with regional and local partners.

Application Requirements:

Consult the NOFO <u>NOAA-OAR-SG-2023-2007550</u>, available at <u>Grants.gov</u>, for eligible applicants, required elements of the application, how to submit, general programmatic priorities and selection factors, and other necessary information. Submit your application to **SPECIAL PROJECTS "E"** under this opportunity in grants.gov.

Discrepancies between this special project announcement and the NOFO may exist. Specific application details and instructions outlined in this special project announcement take precedence over guidelines in the NOFO.

Applications <u>must</u> include the following elements. Failure to adhere to these provisions may result in a delay in award processing or rejection of the application, based on the extent of the noncompliance.

- **1. Project Narrative.** The Project Narrative <u>must</u> include the following elements:
 - a. Project Description. The total number of pages in the project description should not exceed twelve (12) pages. Excess pages will not be included in the review. The works cited, CVs, letters of support, and current and pending support sections do not contribute to the page limit.
 - i. Cover page (does not count towards page limit)
 - Project title and names, titles, affiliations, and contact information (email and phone) of co-PIs.
 - Budget overview Total cost and annual breakdown of requested funding by partner.
 - ii. Project Abstract (does not count towards page limit)
 - iii. Project background
 - Explain the specific problem(s) this project seeks to address and justify its importance.
 - iv. Project objectives
 - Provide a list of clearly defined objectives. For each objective, provide a concise statement explaining how it is aligned with the goals and priorities of this funding opportunity.
 - v. Applicant qualifications
 - Describe your organization's knowledge of, established connections, and/or existing relationships within your region;
 - Describe prior or current work examples that supports topic matter expertise or methodological expertise;
 - Identify key personnel for this work and highlight their expertise, experience, and knowledge.
 - vi. Project details
 - Provide an explanation of the methods you will use to address your project objectives. Explicitly explain how this project leverages the expertise of both researchers and stakeholders.
 - vii. Anticipated outcomes and results

 What are the expected outcomes and results related to the creation of data products, tools, technologies, and management practices?

viii. Project timeline

- Please provide a timeline for accomplishing the proposed work, which
 covers the entire duration of the project. Include approximate dates for
 key milestones related to the proposed work, including the
 accomplishment of anticipated outcomes and release of results.
- Applicants submitting proposals that involve the use of human test subjects should state so clearly in their application. These proposed research activities require approval of the applicant's Institutional Review Board (IRB) before such research can proceed. Applicants are responsible for obtaining IRB approval from their institution and providing that documentation to NOAA once the approval is obtained and prior to any NOAA-funded human subject testing. Proposals intending to use human test subjects should specify clearly in the timeline approximately when IRB approval will be obtained and when the testing is expected to occur.

ix. Diversity statement

- NSGO recognizes it has a particular and unique opportunity to support NOAA's commitment to diversity and inclusion by taking an intentional step that encourages applicants to consider diversity and inclusion as part of their scientific projects. This action has the potential to make an impact on not only the diversity and inclusion in science at NOAA, but also in the equity of services provided by NOAA. In this section, describe how the proposed activity broadens the participation of underrepresented groups (e.g., race/ethnicity, gender identities, sexual orientation, disability, geography, etc.) and how they benefit from its outcomes. Applicants are encouraged to review Sea Grant's vision and priority action plan for advancing Diversity, Equity, Inclusion, and Justice: https://seagrant.noaa.gov/Portals/1/Network%20Visioing/DEI VisionActions 2 0 Sea%20Grant.pdf
- x. Works cited (does not count towards page limit)
 - All in-text citations should be listed here.
- xi. Curriculum vitae (CV) for each co-PI (does not count towards page limit)
 - Each person's CV should not be longer than 2 pages. Excess pages will
 not be included in the review.
- xii. Letters of support (does not count towards page limit)
 - All letters of support should be included here. Required in the instance that a Sea Grant program is applying on behalf of a partnership of multiple Sea Grant programs; otherwise, recommended but optional.
 - Letters of support from potential partners who may play a meaningful
 role in the proposed project are strongly encouraged. Letters should
 include a discussion of the proposed relationship: duration of
 association, prior projects, mechanisms for collaborative work,
 expectations for how the relationship would be extended through
 participation in proposed initiative.

- Potential partners could include, but are not limited to, local/regional government, NGOs, industry partners, community organizations, and other academic organizations.
- xiii. Current and pending support (does not count towards page limit)
 - Describe any current or pending sources of support if applicable.
- b. Abbreviated Environmental Compliance Questionnaire (OMB Control No. 0648-0538)
 - Applicants <u>must</u> ensure that the questionnaire is completed in full and includes detailed information regarding project location, methodology, and permits. Copies of all permits required for project activities should be included with application materials. If a permit is pending or planned, please provide this information.
 - i. A separate questionnaire must be completed for each relevant action/project in the proposal.
 - ii. The questionnaire can be found <u>here</u>.
 - iii. Guidance on how to complete the questionnaire, including how to describe work that will not involve any environmental impact, can be found here.
 Examples of questionnaires can be found <a href=here.*
- c. Data Management Plan
 - i. All applications <u>must</u> include a Data Management Plan that is compliant with NOAA's <u>Public Access to Research Results</u> Plan. The Data Management Plan should not exceed 2 pages. The Data Management Plan should include descriptions of the types of metadata and data expected to be created during the course of the project, plans for disseminating the metadata and data to the broader community, and plans for long-term archiving of the metadata and data.
 - ii. If proposed activities will not generate any environmental data, such as the scoping activities and research competition, please include the following statement at the end of your proposal: "Because this project will not generate environmental data, a Data Management Plan is not required."
- **2. Budget Narrative and Justification.** The Budget Narrative <u>must</u> include the following documents (Sea Grant 90-4 Forms and Budget Justification) in that order and format. Additional budget narrative guidance can be found <u>here</u>.
 - a. Sea Grant 90-4 Form (OMB Control No. 0648-0362) Sea Grant 90-4 Forms are required to provide budget breakdowns and budget justifications by year and object class for the proposal. A completed Sea Grant 90-4 Form should be completed for each project year as well as a total budget for the entire project duration (i.e., Year 1, Year 2, Year 3, and Years 1-3). Guidance on filling out these forms is located in the Sea Grant General Application Guide.
 - b. Budget Justification For each year of the project, a Budget Justification is required. Each Budget Justification should explain the budget items in sufficient detail to enable review of the appropriateness of the funding requested. Each Budget Justification should be attached as a PDF to each Sea Grant 90-4 Form, as appropriate. Guidance on completing the Budget Justification is located in the <u>Sea Grant General Application</u> Guide.

- **3. Overall Application.** In addition to the forms required above, standard Federal Forms and Assurances are required for the overall application and can be found with the application package on Grants.gov or on the Sea Grant website (links found below). These include:
 - a. SF-424 Form (Grants.gov, OMB Control No. 4040-0004)
 - i. This form, titled "Application for Federal Assistance," <u>must</u> identify the entire funding period, as well as the federal funding amount being requested by the applicant and the non-federal matching fund amount. The form must be completed with the institution's accurate EIN and DUNS and Point of Contact, and signed by the institution's authorized representative or designee.
 - b. SF-424A Form (Grants.gov, OMB Control No. 4040-0006)
 - i. This form, titled "Budget Information Non-Construction Programs," should describe the entire funding period in federal and non-federal dollars, for the entire application. Fill out Section B of this SF-424A form to show the overall budget breakdown by object class by year. Each federal and match year should have its own column.
 - c. SF-424B Assurances (Grants.gov, OMB Control No. 4040-0007)
 - i. The form, titled "Assurances Non-Construction Programs," should be completed and signed by the institution's authorized representative or designee.
 - d. CD-511 (Grants.gov, US Department of Commerce)
 - i. The form, titled "Certification Regarding Lobbying," should be completed and signed by the institution's authorized representative or designee. In some instances, the SF-LLL Disclosure of Lobbying Activities form may also be required. See the instructions on the CD-511 for further information.
 - e. SF-LLL (Grants.gov, OMB Control No. 0348-0046) if applicable
 - i. The form, titled "Disclosure of Lobbying Activities," should be completed and signed by the institution's authorized representative or designee, if appropriate.

Application Evaluation Criteria:

The following criteria will be used to evaluate proposals. Note that the weights of each criteria are different from the Evaluation Criteria laid out in the Special Projects NOFO announcement. Proposals submitted to this competition will be evaluated by at least three independent written reviews based on:

- 1. Importance/relevance and applicability of proposed projects to the program goals (25%). This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities.
- Outreach and Education, including efforts to ensure inclusive and equitable engagement (25%).
 This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources.
- 3. Technical/scientific merit (15%). This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives.

- 4. Overall qualifications of applicants (15%). This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project.
- 5. Project costs (10%). This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame.
- 6. DEI Plan (10%). The project adequately considers impacts and seeks to maximize diversity, equity, and inclusion in the way it is executed. The extent to which the project benefits underserved communities will also be considered. DEI impacts of the project being proposed should be discussed, proposal shouldn't repeat or rely on the DEI guidance statements of the applying organization, but make an effort to discuss specifics related to the project.

Additionally, projects will be recommended for funding only if they have a complete application package and if funds are available.

Other Information:

Demographics Information:

- NOAA will not provide collected demographics information to reviewers for any purpose, including evaluation, and will not consider demographics information during selection.
- Programs must submit documentation by either including a statement within the application, or via email to sg.grants@noaa.gov, that they have responded to the new requirement to provide the following information for all named collaborators on the proposal. (2022, OMB approved for PRA under DOC generic clearance information collections, 0690-0030 and 0690-0035).
- Note: Programs may use their own method of collecting this information. The NSGO has also developed an online form as an optional method for collection. Submission to this form would count as fulfillment of this requirement.
 - 1. Do you or your organization identify with any of the following groups that the federal government, in Executive Order 13985, has identified as underserved? List all that apply.
 - a) Black
 - b) Latino
 - c) Indigenous and/or Native American
 - d) Asian American
 - e) Pacific Islander
 - f) Other person of color
 - g) Members of religious minorities
 - h) Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons
 - i) Persons with disabilities
 - j) Persons who live in rural areas
 - k) Persons otherwise adversely affected by persistent poverty or inequality
 - I) No, I do not identify with any of these groups

Reporting:

This will be a stand-alone (i.e., non-omnibus) award for which annual progress reporting will be required.

Once applications have been selected for funding, applicants must submit a Sea Grant 90-2 Project Summary Form (for each project within the application) through the <u>90-2 Webform portal</u>. This is due within 30 calendar days after the applicant has been notified via email that their application has been awarded. A detailed step-by-step guide for completing the web-based 90-2 Form is available on <u>Inside Sea Grant</u>. Once the project is approved and funded, that information will be publicly available and searchable on the <u>National Sea Grant College Program public website</u>.

Recipients are required to use the National Sea Grant Planning Implementation and Evaluation Reporting (PIER) project database to communicate with the National Sea Grant Office on activities relating to this award. This includes tracking progress and impacts, in addition to performance metrics.

All public-facing products produced with funding from the award(s)/project(s) must ensure compliance with Section 508 of the Americans with Disabilities Act.

Agency Contacts:

Questions about this competition or the Special Projects Notice of Funding Opportunity (NOFO) may be sent to sg.grants@noaa.gov. Please specify that your question is related to the Understanding Energy Transitions and Coastal Resilience in the Non-Contiguous U.S. Special Projects Competition in the subject line.

Fillable versions of required Sea Grant forms can be found here: https://seagrant.noaa.gov/insideseagrant/Implementation