

# Duke Energy Innovation Fund Grant Competition: Call for Proposals

Optional Letter of Intent deadline: November 8, 2019

Proposal deadline: December 6, 2019

With funds provided by Duke Energy Renewables, Inc. (DER), Sustainable GW announces the fourth annual competition for *interdisciplinary teams* of GW faculty to compete for research funding. The total funds available are \$85,000 and the number of awards will depend on the quality and quantity of the applications. The projects should focus on energy research in some way. All energy topics are possible, including those that affect the climate, water, food, and cities either directly or indirectly. Faculty are encouraged to contact Sustainable GW Research Director Robert Orttung ([rorttung@gwu.edu](mailto:rorttung@gwu.edu)) to discuss possible proposal topics to be sure that they are appropriate for this competition. The interdisciplinary team projects may include the assistance of GW students and staff, and other collaborators from outside the university, as appropriate. Three kinds of grants may be awarded.

**Research Grants.** Awards will support novel research ideas that address sustainability issues and show great promise.

**Planning Grants.** Awards will support work to develop competitive grant proposals in response to U.S. government and other solicitations. These grant awards are a strategy to leverage the significant U.S. federal government and other outside investment in research.

**Living Lab Grants.** Awards will support collaborative research conducted by teams of faculty, students, and staff. Associated activities may include, but are not limited to, field trips to research locations, various kinds of data analysis, and the development of case study materials. The project may focus on the Capital Partners Solar Project and include field trips to the solar farm sites in North Carolina and DER headquarters, but that is not necessary.

## The 2019 Duke Energy Renewables Innovation Fund Solicitation

### A. Proposal Timeline

Proposals are currently being accepted. Please submit an optional brief letter of intent that is no more than one page by **5 p.m. Friday, November 8, 2019** if you would like some initial feedback. This letter should include the title of the project, the faculty and key partners involved, an estimated overall budget figure, and a 1-2 paragraph description of the project. The deadline for submission of the full proposal is **5 p.m. Friday, December 6, 2019**. Award decisions are expected the beginning of January 2020. To submit a proposal for consideration, email the proposal and supporting documents to Robert Orttung at the following address: [rorttung@gwu.edu](mailto:rorttung@gwu.edu).

## **B. Eligible Applicants**

Only GW faculty members are eligible to serve as the principal investigator for proposed projects. Co-principal investigators and other contributors to the project may include staff and students and team members may be drawn from institutions beyond GW.

## **C. Interdisciplinary Requirement**

To be considered for a research or planning grant award, proposals must include an interdisciplinary research team. Such a team could include faculty from engineering, physical sciences, social sciences, the humanities, and schools of law, public health, public policy, business and education as well as the Corcoran. Creative and unexpected combinations are encouraged. Each project should have a minimum of two faculty.

## **D. Selection Process**

A Committee consisting of DER and GW leaders will examine the proposals. This Committee will select the winning proposals and determine the amount of the awards, based on the quality, novelty, and relevance of the submissions.

## **E. Available Funding and Anticipated Number of Grants**

The Committee will award up to \$85,000 in the 2020 cycle. The dollar amount per award and the number of overall awards made will depend on the needs of the projects selected and other factors (including the number and quality of the proposals submitted) as the Committee determines relevant and appropriate. Proposals can be up to \$85,000 and the committee will decide how to divide the funds among one or more grants based on the quality of the proposals.

## **F. Duration of Grant**

Funding will be for one-year projects. If the proposed research is multi-year, then a defined one-year component of the work must be identified, with a one-year deliverable that meets the objectives of the Fund. Multi-year proposals should include a discussion of the impact on and value of the project if funding is not renewed.

## **G. Research Topics**

The 2020 competition will accept proposals for research, planning, and living lab grants. The Committee has chosen to provide faculty maximum opportunity to submit innovative energy-related research ideas. For this reason, there are no restrictions on what research topics may be proposed – all submissions will be fully evaluated.

## **H. Proposal Guidelines**

### **1. Proposal Content and Length**

#### **a. Research Grant Proposal – 2,000 word limit**

**Introduction.** Include a clear statement of the goal(s) and supporting objectives of the proposed project. Summarize the body of knowledge or past activities that substantiate the need for the proposed project. All works cited should be referenced.

**Rationale and Significance.** Explain the rationale behind the proposed project. Describe the potential contribution to sustainability concerns. Any novel ideas or contributions that the proposed project offers should also be discussed in this section.

**Approach.** The activities proposed or problems being addressed must be clearly stated and the approaches and methodology to complete the work should be clearly described, noting the interdisciplinary nature of the project. This section must include the following: expected outcomes; the means by which results will be analyzed, assessed, or interpreted; how results or products will be used; pitfalls that may be encountered; limitations to proposed procedures; and a timeline for attainment of objectives and for production of deliverables with specific, measurable outcomes.

**b. Planning Grant – 1,000 word limit**

Include a brief discussion of the most essential components detailed above for a Research Grant, presenting enough detail to allow adequate evaluation. Describe how the Planning Grant will allow the applicant to become competitive for future funding. Identify where the applicant will seek funding and provide a timeline for submission.

**c. Living Lab Grant – 1,000 word limit**

The Association for the Advancement of Sustainability in Higher Education defines living laboratories as faculty and student collaborations utilizing university infrastructure and operations for multidisciplinary learning and applied research to advance sustainability. Describe how the proposed project is a living lab, the research or activity to be undertaken, and the learning objectives for students. If relevant, describe how the project relates to a specific GW class and/or if it will be an offering under the course Sust. 3096, Directed Research. If the research for a living lab proposal relies upon information that is related to the business and/or legal terms of the Capital Partners Solar Project, a list of the data/information requested must be included.

**2. Required Attachments**

**i. Budget**

Provide a budget that includes, at a minimum, all personnel percent time commitments and, if applicable, equipment purchases and travel (e.g., living lab classroom travel). Include resource needs for outreach/communications and student engagement. These grants will not be subject to university overhead.

**ii. Key Personnel**

Clearly describe the roles and responsibilities of the Principal Investigator, co-PI(s), collaborator(s), and other key personnel. Describe how personnel meet the requirement for an interdisciplinary team. Two-page biographical sketches for key personnel should be attached and these sketches will not be calculated in the proposal word limit.

### iii. Outreach/Communications Plan

Briefly describe how research findings will be shared through publications and meetings, keeping in mind the special opportunities afforded by GW and its DC location. For example:

- **Exclusive salon discussions** with key thought leaders and decision makers from academia, industry, government, and non-profit sectors.
- **Symposia and conferences** open to the public to share challenges and best practices emerging from the research.
- **Planet Forward productions** to help promote innovation and solutions with scientists, business leaders, advocates, students and government leaders ([www.PlanetForward.org](http://www.PlanetForward.org)). Planet Forward can serve as an interdisciplinary player in the communication and translation of science by engaging faculty and/or students to capture and communicate the nature of the innovation and, the significance of the research. This can be through social media (e.g. Twitter crowd-sourcing) or a more traditional media approach with video, discussion, podcast or text.

### iv. Student Engagement

Student involvement is critical to the partnership between GW and DER. Provide a brief description of the ways GW students could participate in and enhance the research partnership. For example, students may participate as:

- **Research assistants** on the various projects, enabling students to obtain first-hand knowledge of the solar and utility industry, and to gain skills related to project finance, renewable energy technology, market dynamics, and legal and public policy context.
- **Social media participants** through Planet Forward ([www.planetforward.org](http://www.planetforward.org)) to promote innovation and solutions with scientists, business leaders, advocates, students and government leaders. The students would engage in cutting-edge journalism through video, on-line, and other media. Students tell the stories, apply journalistic/film standards to explore the ideas, the individuals, the challenges, the opportunities and the obstacles related to the research project. Students tell these stories to inform stakeholders, policymakers, contemporaries and the public with the goal of raising awareness of the project among students, academic institutions, and professional peers.
- **Classroom participants** in a living lab curricular exercise.
- **Other roles** such as interns and networking with DER managers and executives as appropriate.

## I. Evaluation Criteria

### a. Merit of the Application

1. Project objectives are clearly described and will facilitate long-range improvements in sustainability;

2. Expected results or outcomes are clearly stated, measurable, and achievable within the allotted time frame;
3. Proposed outreach/communications plan can reasonably be expected to communicate project results to an identified audience or stakeholder group; and

**b. Project Management**

1. Roles of key personnel are clearly defined;
2. The personnel team is interdisciplinary;
3. A clear plan is articulated for project management and assessing the effectiveness and impact of the project.

## **Background Information**

The Power Purchase Agreement between George Washington University (GW) and Duke Energy Renewables, Inc. (DER) was a pioneering agreement, demonstrating an important way in which universities and private corporations can constructively partner to advance sustainability. GW and DER now have the opportunity to further that relationship by leveraging the world-class expertise of GW faculty and the innovative spirit and business and policy acumen of DER to advance research in sustainability. To this end, GW and DER have entered into a Memorandum of Understanding establishing the Duke Energy Renewables Innovation Fund.

### **About Sustainable GW**

Sustainable GW is the administering entity for the Duke Energy Renewables Innovation Fund. Sustainable GW coordinates GW sustainability efforts in operations, education, research, public engagement, and practice to maximize impact and to leverage GW assets for positive environmental, social, and economic benefits. Through Sustainable GW, the university is creating a more sustainable campus, fostering research and curricula in sustainability, and providing students with the skills and knowledge to contribute to a sustainable future.