

2025 UH ENERGY REQUEST FOR PROPOSALS



UH Energy

UNIVERSITY OF HOUSTON

PROPOSAL GUIDELINES

in partnership with

Energy Transition Institute and Center for Carbon Management in Energy

RFP TIMELINE

Proposal Call Introduction Webinar: October 28, 2025;
7:00 PM

Zoom Meeting ID: 897 5182 9236

Zoom Call Link

Proposal Preparation Office Hours:(up to 2 consultations, 15 minutes each) By appointment with Dr. Debalina Sengupta

Proposal Submission Deadline: December 20th, 2025,
Midnight

Final Project Announcement: January 2026

SUBMISSION GUIDELINES

- **Combine all files** of the completed proposal into a single PDF (Cover Page, Proposal narrative, Target impact, 2-page CV, Budget etc.)
- Name the file **LAST_FIRST_UHEnergy2025** where the LAST is your last name and the FIRST is your first name
- Upload the file to the **Microsoft forms** using your **UH id only**. Any other login will not allow upload of file.

RFP TOPICS

OVERVIEW: UH Energy aims to leverage Houston's position as a global leader in energy and chemicals, and University of Houston's role as The Energy University® through this request for proposals. Through targeted centers and institutes under UH Energy (ETI and CCME), the researchers will have access to implementation of projects with local, regional, and national partners.

PURPOSE AND TOPICS OF RFP: The purpose of this Request for Proposals (RFP) is to support the advancement of current research toward practical application and implementation. The RFP aims to foster partnerships and enable direct collaboration and commercialization opportunities with national laboratories, industry, and other key stakeholders. Proposals should focus on research and technology innovation that can be scaled within the next 2–3 years, or that can directly inform and influence policy, regulations, and legislation shaping the future of energy and energy systems. Specifically, proposals are sought to address following topics:

CARBON MANAGMENT

- § Upstream methane leakage and abatement.
- § CO₂ utilization including synthetic e-fuels, enhanced oil recovery and residual oil zone.
- § Permitting reforms including innovative data analytics, and AI.

ENERGY SYSTEMS

- § Processing and purification of critical minerals.
- § Grid expansion and resilience including fortification of supply chains (including storage).
- § Energy systems technology, efficiency for new large-load consumers (e.g. data centers, manufacturing) including energy arbitrage for operational efficiency.
- § Advancing energy systems including biomanufacturing, geothermal, and nuclear energy.

Any other topics in the broad areas of Carbon Management and Energy Systems will also be considered if the PI can justify Section III of the proposal preparation section.

PROPOSAL PREPARATION

I. COVER PAGE (use attached form)

II. PROPOSAL NARRATIVE (3 Pages)

Arial or Times New Roman, 12 point font.

The following outline should be used for the narrative portion of the proposal and is part of the 3-page limit.

- **Topic of RFP.** Select the specific RFP topic from the CARBON MANAGEMENT or the ENERGY SYSTEMS areas (from the RFP Topics section above).
- **Problem Statement.** Provide a crisp problem statement not exceeding 50 words.
- **Goals and Objectives.** Emphasize the importance of the project and summarize previous research (if any) in the field. Describe the targeted goals and objectives of the project with an emphasis on the impact the project aims to achieve.
- **Approach.** Provide details of how the research will be conducted, including tasks.
- **Timeline.** Provide a Table/Gantt chart with timelines associated with tasks. Funds will be available for expenditure for 18 months, starting from January 2026. No extensions will be provided.
- **Expected Outcomes.** Outline the anticipated outcomes.
- **Equipment and Facilities.** Describe the equipment and facilities available for the project. Justify any equipment requested in your budget.
- **Internal and External Funding.** Summarize any prior internal and/or external funding over the previous 24 months that you have received for this area of research. Include project title, amount, sponsor, and project start and end dates.

PROPOSAL PREPARATION (contd.)

III. TARGET IMPACT FROM SEED GRANT (1 page)

Specific plans for at least one (or more) of the following:

- Identified external funding opportunity or anticipated opportunities.
- Partnerships or plans to engage with industry, national labs or other stakeholders (who will the research serve?)
- Potential for commercialization.
- Policy impacts and alignment with practice.

IV. RESULTS OF PREVIOUS SEED FUNDS FROM CCME, ETI OR UH ENERGY (up to 1 Page)

Provide a brief description of the results of previous funding from CCME, ETI and UH Energy, with specifics on:

- External funding generated (\$ to PI, \$ leveraged in the Houston Energy Ecosystem, role of PI).
- Papers and presentations where the funding from UH Energy, ETI or CCME are acknowledged.
- The names and accomplishments of students and post-docs supported through the funds.

V. CURRICULUM VITAE (2-page NSF format)

- Include vitae for all professional personnel who will work on the project using NSF format. Do not exceed two pages for each individual. The curriculum vitae should list the five most significant publications that relate to the proposed research.
- Include a list of all current and pending support for each investigator, both external and internal (no page limit).

VI. REFERENCES (1 page)

1-page limit; references may be single-spaced.

PROPOSAL PREPARATION (contd.)

VII. BUDGET

Provide an overall budget and justification for the expenditure of the funds by the general category using the attached template.

- Faculty summer salary is allowed for up to 1 month for the grant period.
- Please include budget and travel plans for at least 1 presentation to technical conference for student or post-doc or faculty (**up to \$3000**).
- Please include travel budget to host at least one high visibility stakeholder relevant to your project on campus (**upto \$2000**). The stakeholder may be invited to provide a seminar or to strengthen research and implementation partnership for the project.

Requests for the following will **NOT be funded**:

- Purchase of computer hardware (e.g. monitors, keyboards, printers, various peripherals).
- Generic computer software for which UH has a license, except for packages directly related to the project such as mathematical toolboxes.
- Graduate student tuition and fees (those costs should be covered by GTF).
- No indirect costs are to be applied.
- Funds should not be used for the purchase of equipment exceeding \$5,000.

Cost center establishment following a successful review process will require congruency review. Additional paperwork may be required to complete the congruency review. If needed, UH Energy, will provide interim funding during the period UH required to establish cost centers.

VIII. APPENDIX (Optional)

Include attachments or other information that is important for proposal evaluation (1-page limit).

PROPOSAL DETAILS

ELIGIBILITY: Full-time tenure or tenure-track faculty and non-tenure track research faculty from UH are eligible to submit proposals. Proposals may include external participants, but external participants may not receive funding from this call. If you plan to have external engagement, specifically mention the need or plan in the “Specific Plans” section of the proposal.

PROGRESS AND MANAGEMENT REPORTING: Grantees are required to submit short quarterly written progress reports, deliver oral presentations every six months, and provide a final report at the end of the project term. Timely and sufficient progress, as assessed through these reports and presentations, is essential; failure to comply may result in early termination of project funding. All publications resulting from research supported by this grant must acknowledge funding from UH Energy, ETI, and CCME. Faculty are also encouraged to leverage this funding to pursue large-scale proposals, industry-sponsored projects, or collaborations with national laboratories. Such efforts should be clearly highlighted in all progress and management reporting.

FUNDING AMOUNT:

- Grants are limited to **\$120,000** per proposal for an 18-month period.
- Expected to award **6-8 funded projects** with a funding total across all grants of **\$800K+**.
- Funding is contingent on the availability of funds.

DURATION: All projects are 18 months with no exceptions. UH Energy will not support any requests for no-cost extensions for proposals awarded through this mechanism.

PROPOSAL DETAILS (Contd.)

EVALUATION AND REVIEW CRITERIA: A review panel that includes representatives from the External Advisory Board (ETI/CCME/UH Energy) and UH Energy Leadership will evaluate the proposals based on the criteria provided below. A short list of proposers may be asked to make an oral 15-minute presentation. Decisions will be announced prior to January 15, 2026.

Selection of proposals will be based on the following criteria:

- Relevance of the proposal to the project descriptions provided above.
- Quality of the proposed research and plans for engagement/impact.
- Experience and track record of investigators.
- Identification of follow-up avenues to leverage UH Energy funding support with well-developed strategies for extramural grant development
- Appropriateness of the budget request

PROPOSAL FORMAT: Applicants must submit one PDF file of the complete application by **December 20th, 2025**. Late applications will not be considered. Only proposals that meet the criteria for awards, as stated in the guidelines, will be considered and/or reviewed for funding.

QUESTIONS:

All questions regarding this Grant Program may be directed to Debalina Sengupta, dsengupta@uh.edu or Ramanan Krishnamoorti, ramanan@uh.edu

I. COVER PAGE

PI Name:		PI Employee ID#:	
PI Department:		PI College:	
PI Email:		PI Phone:	
Co-PI Name:		Co-PI Employee ID#:	
Co-PI Department:		Co-PI College:	
Co-PI Email:		Co-PI Phone:	
Other Investigators (Include their Dept/College/Email and Phone)			
External Partners (attach letters of collaboration/ recognition)			
Project Title:			
Total Funds Requested:			

Select Research Area (mark all that apply)

- Carbon Management Energy Systems

Does this proposal involve (mark all that apply)?

- Animals Human Subjects Radioisotopes
- Research Involving Recombinant DNA Molecules or other biological materials

If so, indicate submission and approval status:

SIGNATURE or E-SIGNATURE:

Principal Investigator

Date

VI. OVERALL BUDGET

	Funds Requested	Other Funds**	Total
SALARIES & WAGES (Identify function)			
Faculty Salaries			
Research Assistants			
Student Wages			
Non---Student Wages			
FRINGE BENEFITS			
MAINTENANCE & OPERATIONS (Example: chemicals, supplies, services)			
TRAVEL (May be subject to State guidelines)			
Equipment (No equipment above \$5000 will be supported) (Specify items over \$1,000 each)			
TOTAL PROJECT COST			

**** No matching funds or external funds are required to be shown.**

BUDGET JUSTIFICATION: (Justify all costs)