Funding Opportunities as of March 9, 2022

Opportunities Listed by Deadlines

1. **$25M - Concentrating Solar-Thermal Power: Fiscal Year 2022 Research, Development, and Demonstration Program**
   Deadline for Concept Paper: March 16, 2022, 5 PM ET
   Deadline for Full Applications: May 16, 2022, 5 PM ET

   This funding opportunity announcement (FOA) is being issued by the U.S. Department of Energy’s (DOE) Office of Energy Efficiency and Renewable Energy (EERE) Solar Energy Technologies Office (SETO) to invest in innovative research, development, and demonstration (RD&D). While PV has dominated the U.S. solar market, with over 90 GW deployed by the end of 2020, CSP technologies offer a unique value as a renewable energy resource that can readily deliver high-temperature heat and inherently incorporates storage for on-demand solar energy. There are nearly 100 CSP plants in commercial operation worldwide, representing almost 7 GW of capacity. These projects serve as real-world laboratories for developing best practices and identifying priority areas for further technology development. Continued optimization of these practices will improve the performance, reliability, and cost of future CSP plants, which have the potential to provide between 25 and 160 GW of U.S. capacity by 2050.

   For next-generation CSP plants, SETO has set a target to lower the cost of electricity from baseload plants, with greater than 12 hours of storage, to $0.05/kWh by 2030. This represents, approximately, a 50% reduction of existing costs. Submissions in the following topic areas will be given full consideration:

   - **Topic Area 1: Concentrating Solar Thermal for Industrial Decarbonization**
   - **Topic Area 2: Concentrating Solar-thermal Particle Technologies for Generation 3 CSP and Beyond (Gen3++)**

   [Download PDF](#)

2. **$150M - Chemical and Materials Sciences to Advance Clean Energy Technologies and Low-Carbon Manufacturing**
   Required Pre-application Due: March 16, 2022, 5 PM ET
   Full Applications Due: May 17, 2022, 11:59 PM ET
   Informational Webinar - February 23, 2022, 9:30 AM ET

   The U.S. Department of Energy announced $150 million in open funding for research projects focused on increasing efficiency and curbing carbon emissions from energy technologies and manufacturing. This funding will support research underpinning DOE’s Energy Earthshots Initiatives, which set goals for significant improvements in clean energy technology within a decade, including hydrogen, long duration storage, and carbon capture and sequestration.

   Funding will support an array of research topics in basic chemical and materials research, including new clean
energy approaches that are inspired by energy-efficient biological processes, such as photosynthesis. This funding will also support research underpinning DOE’s Energy Earthshots Initiatives, including the Hydrogen Shot, which aims to decrease the cost of producing hydrogen; the Long Duration Storage Shot, which seeks to reduce the cost and increase the duration of grid-scale energy storage; and the Carbon Negative Shot, which targets the decrease of costs to remove and durably store carbon dioxide from the atmosphere.

DOE encourages applications led by, or in partnership with, Minority Serving Institutions (MSIs) that are underrepresented in the Basic Energy Sciences portfolio and applications involving individuals from groups historically underrepresented in STEM.

**FOA Here**
**Webinar Registration**

3. **DOE Announces $19 Million for Carbon Utilization**  
   Concept Paper Due: March 18, 2022, 5 PM ET  
   Full Applications Due: May 27, 2022, 5 PM ET  

   The funding opportunity announcement (FOA), entitled “Carbon Utilization Technology: Improving Efficient Systems for Algae,” specifically aims to increase the capability of algal systems to capture carbon dioxide and put it to productive use. Capturing this waste carbon then allows for algae to be cultivated into a variety of biofuels and bioproducts. The deployment of algal technologies in these projects will help lower algal system cost, while decreasing GHG emissions.

   **More Details**

4. **DOE Announces $28M to Develop Clean Hydrogen**  
   Responses Due: March 23, 2022, 11:59 PM ET  
   Please note: This is an extension/modification to an FOA issued one year ago.  
   The U.S. Department of Energy’s (DOE) Office of Fossil Energy and Carbon Management (FECM) announced a $28 million funding opportunity announcement entitled, "Clean Hydrogen Production, Storage, Transport, and Utilization to Enable a Net Zero Carbon Economy." This FOA is for research and development (R&D) and front-end engineering design (FEED) projects that will advance clean hydrogen as a carbon-free fuel for transportation, industrial use and electricity production. Most hydrogen in the United States is traditionally produced using natural gas without carbon capture, which is not clean. This funding opportunity announcement (FOA) will leverage innovative approaches to produce clean hydrogen at lower costs from materials that include municipal solid waste, legacy coal waste, waste plastics, and biomass with carbon capture and storage.

   **More Details**

5. **New Round of Funding for DOE SBIR/STTR Programs**  
   Letter of Intent Due: March 30, 2022, 5 PM ET  
6. **Full Applications Due: April 19, 2022, 11:59 PM ET**  
   The SBIR and STTR programs are U.S. Government programs, intended to help certain small businesses conduct R&D. At the DOE, funding takes the form of grants. Projects must have the potential for commercialization and meet specific DOE mission-specific R&D needs.

   DOE offers more than sixty technical topics and 250 subtopics, spanning research areas that support the DOE mission in:

   Energy Production  
   Energy Use  
   Fundamental Energy Sciences  
   Environmental Management, and  
   Defense Nuclear Nonproliferation
7. **Support Grants For Participation in ARPA-E Grid Optimization (GO) Competition - Challenge 3**
   Responses Due: April 4, 2022
   This FOA will fund research and development of solution techniques that will be used by awardees to compete in Challenge 3 of the Grid Optimization (GO) Competition. The GO Competition is a series of prize challenges to accelerate the development and comprehensive evaluation of grid software solutions. The GO Competition, Challenge 3, is an algorithm competition focused on the optimal power flow (OPF) problem for the electric power sector that includes AC power flow, optimal topology, bid-in demand, unit commitment, and N-1 reliability.

   Awardees under this FOA will be required to participate in Challenge 3, anticipated to launch in the Spring of 2022. Participation in the GO Competition Challenge 3 will be open to anyone that satisfies the applicable requirements in the rules posted on the GO Competition website, not just those awarded under this FOA.

   Download FOA
   GO Competition Website

8. **University Training and Research for Fossil Energy and Carbon Management**
   Applications Due: April 4, 2022
   This Funding Opportunity Announcement is to solicit and award research and development grants to educate and train the next generation of engineers and scientists by supporting novel, early-stage research at U.S. colleges and universities.

   More Details

9. **Deploying Solar with Wildlife and Ecosystem Services Benefits (SOLWEB)**
   Applications Due: April 11, 2022, 5 PM ET
   Full Application Due: June 20, 2022, 5 PM ET
   This funding opportunity announcement (FOA) is being issued by the U.S. Department of Energy’s (DOE) Office of Energy Efficiency and Renewable Energy (EERE) Solar Energy Technologies Office (SETO). Its goal is to develop solutions and/or strategies that minimize the adverse impacts of solar energy on wildlife and maximize the ecosystem benefits while enabling the rapid deployment of ground-mounted solar energy. SETO is interested in projects that will produce results with broad relevance to solar stakeholders by establishing methods, technologies, models, best management practices, and/or resources that facilitate solar energy’s pivotal role in achieving a 100% clean electricity system by 2035 and a net-zero energy system by 2050. Successful projects will produce research results that are generalizable to multiple sites, pertinent to multiple stakeholder groups, impactful in a short timeframe (i.e., 3 years or less), and engage local communities most affected by solar energy deployment.

   Download FOA

10. **Mining Innovations for Negative Emissions Resource Recovery (MINER)**
    Applications Due: April 15, 2022 9:30 AM ET
    The Mining Innovations for Negative Emissions Resource Recovery (MINER) program’s aim is to support the development of commercial-ready technologies that give the United States a net-zero or net negative emissions pathway toward increased domestic supplies of copper, nickel, lithium, cobalt, rare earth elements, and other critical elements required for the transition to clean energy. The lack of a secure domestic supply of these minerals poses a significant supply chain risk for the United States, especially with regard to batteries, renewable energy generation, and transmission. Meanwhile, the domestic mining industry faces the rapid depletion of high-profit deposits, increased cost of mining and processing, expensive, management, and accumulation of tailings, resulting in an overall reduced return of investment by conventional mining methods.

    Consequently, the Advanced Research Projects Agency – Energy (ARPA–E) is issuing this Funding Opportunity Announcement (FOA) with objectives to support the development of technology and approaches to: (1) decrease comminution energy by 50% compared to state-of-the-art; (2) increase yield of energy-relevant minerals by reducing unrecovered energy-relevant minerals in the tailings by 50% compared to state-of-the-art; and (3) enabling the negative emissions production of key minerals by sequestering >10 wt.% CO2e per metric ton of ore processed. This FOA supports the development of viable technologies to achieve these goals cost-effectively with the potential to reach commercial scalability.
11. **Civic Innovation Challenge**  
**Proposals Due: May 5, 2022**  
The Civic Innovation Challenge is a multi-agency, federal government research and action competition that aims to fund ready-to-implement, research-based pilot projects that have the potential for scalable, sustainable, and transferable impact on community-identified priorities. It aims to flip the community-university dynamic, inviting communities to identify civic priorities ripe for innovation and to then partner with researchers to address those priorities.

The agencies which are implementing this program are the National Science Foundation, Department of Energy, Department of Homeland Security, and the MetroLab Network.

Teams’ proposals will be reviewed by civic leaders and researchers in NSF-led review panels. NSF, DHS, and DOE will jointly select Stage 1 planning grants of up to $50K, who will then have the opportunity to apply for Stage 2 full awards. Stage 2 awardees will receive $1 million and have 1 year to implement their pilot projects in communities across the country.

**More Details**

**Full Proposals Due: May 11, 2022, 5 PM ET**  
The AMPS program will support research projects that aim to assess the operational state of the power grid using mathematical and statistical methods. Because the complicated nature of the power grid itself presents a major barrier to its modeling and simulation, the AMPS program aims to catalyze fruitful collaborative research projects to develop mathematical and statistical tools needed to address operational and planning issues for the power grid. The program encourages interdisciplinary efforts, with the involvement of experts in a variety of disciplines such as power system engineering, mathematics, statistics, and financial mathematics.

**More Details**

13. **NORAU-Directed Research and Development (ODRD) Program - Call for Proposals**  
**Proposals Due in June (no specific date given)**  
The Research and University Partnerships Office of the Oak Ridge Associate Universities (ORAU) program formally announced the Call for Proposals (CFP) for the FY23 ORAU-Directed Research and Development (ODRD) Program. The FY23 research areas are Climate and Environment, Health Equity, and Future of the STEM Workforce. Proposals are due in June 2022, and must be submitted by ORAU staff.

ODRD projects are joint collaborations between ORAU and university researchers, designed as seed projects to attract ongoing research funding. ORAU researchers lead the effort as Principal Investigator and are responsible for initiating and proposing the project. Funding for awarded projects is shared between both parties, and projects must be completed in one year. The period of performance is October 1, 2022 – September 30, 2023.

Member university personnel with active relationships with ORAU staff are encouraged to reach out directly to discuss the potential for an ODRD project. Georgia Tech is an ORAU member institution.

**Details Here**

14. **DOE Funding Opportunity Announcement - "Open Call"**  
**Deadline: Open until replaced by next fiscal year's call, Sept. 30, 2022**  
The U.S. Department of Energy (DOE) announced up to $400 million in funding for a range of research opportunities to support DOE’s clean energy, economic, and national security goals. The funding will advance the priorities of DOE’s Office of Science and its major programs, including Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, Nuclear Physics, Isotope R&D and Production and Accelerator R&D and Production.

The DOE Funding Opportunity Announcement (FOA), informally known as the “Open Call,” is issued annually at the beginning of each Fiscal Year (FY). It provides a vehicle for the Office of Science to solicit applications for research
support in areas not covered by more specific, topical FOAs that are issued by the office over the course of the Fiscal Year. The FOA, titled “FY 2022 Continuation of Solicitation for the Office of Science Financial Assistance Program,” can be found on the Office of Science funding opportunities page: https://science.osti.gov/Funding-Opportunities

15. **COVID-19 Research at the Spallation Neutron Source and High Flux Isotope Reactor**  
**Deadline:** Ongoing – Resource available for research until further notice.  
With the continuing spread of the COVID-19 pandemic, the Department of Energy Basic Energy Sciences neutron sources will provide remote rapid access to support research into the COVID-19 virus and the search for effective diagnostics and therapies. Researchers who would like to use neutron scattering resources for COVID-19 research may submit a rapid access proposal here.

16. **COVID-19 Research Questions**  
**Deadline:** Ongoing – Open until further notice.  
The Department of Energy (DOE) is taking steps to address COVID-19 and is soliciting ideas about how the Department and the National Laboratories might contribute resources for science and technology efforts and collaborations. The Department is encouraging the scientific community and others to consider research questions that underpin COVID-19 response and is requesting input on strategic, priority research directions that may be undertaken using DOE user facilities, computational resources, and enabling infrastructure. More information is available here.

17. **Solar Energy Innovators Program Opportunity**  
**Deadline:** Rolling - Pending applications reviewed 1st of each month.  
The purpose of the Solar Energy Innovators Program is to enable selected applicants to conduct practical research on innovative solutions to the challenges faced by electric utilities, energy service providers, and electric public utility commissions as the levels of solar energy, as well as other distributed energy resources (DERs), increase on the electrical grid.

Selected applicants will participate for up to two years at a Host Institution on one or more topics related to the integration of solar energy. The applicant must identify a Host Institution and potential mentor at a utility, energy service provider, or public utilities commission (PUC) currently conducting research in an area related to the integration of solar energy onto the electricity grid. Host Institutions may seek potential Innovators that are eligible to apply to the program, but it is the potential Innovator, not the Host Institution or mentor, who submits the application and supporting materials to this site.

For more information, and to apply, click here.

18. **Events Sponsorship Program: Grants up to $4,000 Available to ORAU Consortium Member Universities**  
**Deadline:** Ongoing  
Applications for events occurring between October 1 and March 31 must be received by September 1. Applications for events occurring between April 1 and September 30 must be received by March 1.  
Event or conference sponsorship is often beneficial to our Council of Sponsoring Institution Members, whether as a means of fostering collaboration among Council members, gaining new and important information for a proposal or business plan, and more. To help make these event opportunities possible, ORAU’s University Partnerships Office offers an Events Sponsorship Program to member institutions. Each member university is limited to one award per fiscal year (October through September). Up to $4,000 may be requested to support an event that involves participants from more than one ORAU member institution, including students. Examples of such events include visits to an ORAU consortium member by a renowned speaker, conferences or workshops with a focused theme, or a technology transfer/business plan competition. For more information, please go here.

19. **Funding Opportunity: USMA Releases BAA on Research Topics Related to Army Technologies**  
**Deadline:** Continuously open through March 31, 2022  
The U.S. Military Academy (USMA) released a broad agency announcement (BAA) seeking research proposals than can enable new and significant improvements to Army capabilities and technologies. White papers are expected to focus on basic knowledge and understanding of research topics rather than specific devices or components. The BAA includes topics of interest to the USMA departments, directorate, and research centers and institutes. White papers are encouraged to address the following research topics identified by USMA as they relate to Army technologies and operational capabilities: Socio-Cultural; Information Technology; Ballistics, Weapons, and
Protections; Energy and Sustainability; Materials, Measurements, and Facilities; Unmanned Systems and Space; Human Support Systems; and Artificial Intelligence, Machine Learning, and Quantum Technologies. For more information, please go here.

20. **ADL Ventures and National Renewable Energy Lab Competition**
   **Deadline:** Ongoing
   ADL Ventures is working with the National Renewable Energy Lab (NREL) as a Power Connector for the American-Made Solar Prize, a $3 million prize competition for researchers, innovators and entrepreneurs working on solar technologies. Winners of the competition can receive up to $500K in non-dilutive funding in addition to in-kind support from the National Labs. To date, 60 winners from 23 different states have been selected over 3 rounds for a total of $9M in funding. In addition to the publicity and resources associated with selection by DOE / NREL, the winners benefit from a much more streamlined funding process versus traditional collaborative awards and grants, allowing them to hit the ground running quickly, with minimal restrictions. More information about the price can be found on our ProblemSpace platform or from the NREL Solar Prize information webinar on August 19th. For more information, please go here.