Coordination with other DOE activities

DOE has broad interest in funding science for clean energy. BES coordinates activities and funding in this area with the Advanced Manufacturing Office (AMO), Solar Energy Technologies Office (SETO), Hydrogen and Fuel Cell Technologies Office (HFTO), Bioenergy Technologies Office (BETO), and Vehicle Technologies Office (VTO) within Energy Efficiency and Renewable Energy (EERE), the Office of Electricity (OE), the Office of Fossil Energy and Carbon Management (FECM), the Office of Nuclear Energy (NE), and the Advanced Research Projects Agency—Energy (ARPA-E).

Projects funded by BES as a result of this FOA may be encouraged to explore coordination opportunities with projects funded by other DOE offices in order to maximize scientific and technological impact. Further, concurrent funding opportunities are expected to provide opportunities for synergistic exchange of information among DOE sponsored projects across a broader range of maturity and result in a greater leverage of knowledge emerging from fundamental research (BES supported) and from research and development at higher technology readiness levels (e.g. OE, FECM, NE, ARPA-E, and EERE Offices such as AMO, SETO, HFTO, BETO, and VTO).

Information on EERE Funding, Prize, and Competition Opportunities as well as Requests for Information can be found at <u>https://www.energy.gov/eere/funding/eere-funding-opportunities</u>.

- More specifically, SETO recently issued announcements for: Small Innovative Projects in Solar (SIPs: <u>https://www.energy.gov/eere/solar/articles/funding-notice-smallinnovative-projects-solar-2022-concentrating-solar-thermal</u>) and for Concentrating Solar-Thermal Power (CSP) technology (<u>https://www.energy.gov/eere/solar/articles/funding-notice-concentrating-solar-thermalpower-fiscal-year-2022-research</u>). The CSP FOA has two topics:
 - Concentrating Solar Thermal for Industrial Decarbonization which will fund research, development, and demonstration of the most promising technology pathways for concentrating solar thermal (CST) to provide renewable, high-temperature heat to industries like iron ore reduction and steel manufacture, cement production, and ammonia synthesis. Projects in this topic are expected to develop and validate components, like receiver/reactors, heat exchangers, and thermal storage systems, relevant to solar thermochemical processes that directly replace existing fossil-fuel driven technologies.
 - 2) Concentrating Solar-thermal Particle Technologies for Generation 3 CSP and Beyond which follows on the selection, by SETO, of the solid-particle system as the most promising 'Gen3' pathway for collecting, storing, and delivering high-temperature (>700 °C) solar heat to advanced power cycles for next generation, high-efficiency CSP systems. In particular, this topic is focused on continuing the development of particle-based systems and components for supercritical carbon dioxide (sCO2), steam and thermal industrial process applications and will leverage, and supplement, the 1 MWth integrated test facility currently under construction at Sandia National Laboratories, to fill gaps and build on the lessons learned from that existing effort.

Information on FECM Funding Opportunities can be found at <u>https://www.energy.gov/fecm/funding-opportunity-announcements</u>.

- FECM recently released <u>DE-FOA-0002684 a Notice of Intent to issue Funding</u> <u>Opportunity Announcement No. DE-FOA-0002614</u> which includes topics relevant to carbon dioxide removal.
- FECM also recently released funding opportunity announcement <u>DE-FOA-0002400</u>, <u>Fossil Energy Based Production, Storage, Transport and Utilization of Hydrogen</u> <u>Approaching Net-Zero or Net-Negative Carbon Emissions, Amendment 6</u> which has topics relevant to carbon-neutral hydrogen.

Information on NE Funding Opportunities can be found at <u>https://www.energy.gov/ne/funding-opportunities</u>.

Information on ARPA-E Funding Opportunities can be found at <u>https://arpa-e.energy.gov/about/apply-for-funding</u>.