# CIF FY24: Climate Related Technology Areas

In recognition of NASA's leadership in developing advanced technologies for the benefit of all, CIF proposals related to advancing national capabilities in the following climate-related technology areas with relevance to terrestrial applications will also be considered:

- Clean Energy and Emissions Mitigation Technologies: Clean energy and emissions mitigation technology projects focusing on the research and development, demonstration, or deployment of systems, processes, best practices, and sources that reduce the amount of greenhouse gas emitted to, or concentrated in, the atmosphere.

- U.S. Climate Change Research Program: Earth-observing capabilities to support breakthrough science and National efforts to address climate change.

## Specific topic areas may include:

- Reductions in greenhouse gas emissions (including CO2, CH4, N2O, HFCs)
    - Fuel Cells, Batteries, and Energy Storage
    - Carbon Capture, Utilization, and Storage
    - Processes that enhance industrial efficiency, building construction/maintenance efficiency, and reduce emissions
    - Production of clean energy including solar, hydrogen, nuclear, or other clean energy sources
- Sustainable Aviation Technologies
    - Aircraft operational efficiency (including trajectory optimization and air traffic management)
    - Aircraft power, propulsion, and mobility
- Enabling platforms and early-stage instruments for climate-relevant science observations
- Harnessing data for improved visualization and ultimately climate adaptation decision support

**Points of contact for additional information**:
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- Nuclear systems: Anthony Calomino (anthony.m.calomino@nasa.gov)
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- Carbon capture and utilization: James Broyan (james.l.broyan@nasa.gov)
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