NSF Critical Aspects of Sustainability (CAS): Innovative Solutions to Climate Change is a call to action that develops forward-thinking research that will demonstrably aid in the Nation’s goal of reaching net-zero emissions for societal benefit. The FY23 research areas are designed around three principles: (1) focusing on sustainable energy and infrastructure; (2) integrating multiple sectors, such as the aviation industry; and (3) engaging stakeholders to identify high-impact opportunities. The FY23 opportunities are structured around two tracks:

- **Track 1** - for projects with a total budget of up to $600,000 for an award duration of 3 years, and

- **Track 2** - for projects with a total budget of up to $2,000,000 for an award duration of 5 years.

Proposals are due by September 19, 2022.

The Dear Colleague Letter: Design for Sustainability in Software Applications encourages the submission of novel and high impact proposals that advance computing practices, software applications, and tools for sustainability. The proposed scope for design for sustainability in software applications includes, but is not limited to, the following areas:

- **Climate and Environment**
- **Health Equity**
- **Future of the STEM Workforce**

Proposals are due by August 25, 2022.

The RFA-ES-22-003: Research Coordinating Center for the Climate Change and Health Community supports high-impact technology RD&D to accelerate the bioeconomy and, in particular, the development and deployment of biofuels and bioproducts that are sustainable, low-carbon, and economically competitive. BETO is focusing on applied RD&D to improve the performance and reduce cost of biofuel and bioproducts.

Proposals are due by September 19, 2022.

The Call for Proposals: Integrated Approaches to Human Health and Environmental Demands encourages proposals that address the challenges of climate change and human health, with an emphasis on the integration of research and development in the areas of climate change and health. Proposals are due by November 15, 2022.

The NOSI ES-22-010: SBIR Innovative Technologies for Greenhouse Gas Reduction in First-Generation Ethanol supports high-impact technology RD&D to accelerate the bioeconomy and, in particular, the development of technologies that reduce greenhouse gas emissions from first-generation biofuel production. Proposals are due by December 16, 2022.

The RFA-ES-22-003: Research Coordinating Center for the Climate Change and Health Community supports high-impact technology RD&D to accelerate the bioeconomy and, in particular, the development and deployment of biofuels and bioproducts that are sustainable, low-carbon, and economically competitive. BETO is focusing on applied RD&D to improve the performance and reduce cost of biofuel and bioproducts.

Proposals are due by September 19, 2022.

The Greenhouse Gas Reduction in First-Generation Ethanol initiative encourages the submission of novel and high impact proposals that advance computing practices, software applications, and tools for sustainability. The proposed scope for design for sustainability in software applications includes, but is not limited to, the following areas:

- **Climate and Environment**
- **Health Equity**
- **Future of the STEM Workforce**

Proposals are due by August 25, 2022.

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