For nearly 70 years, federally funded research and development centers, or FFRDCs, have been vital to our nation’s growth and security. They have supported the government by developing transformational capabilities in defense, transportation, energy, civil agency administration, homeland security, atmospheric sciences, science policy, and other areas.

FFRDCs are part of a “three-legged stool” that supports government research, technology development, systems acquisition, and policy guidance. The three “legs” are commercial industry, academic and related not-for-profit organizations (including FFRDCs), and government employees. Each of these institutional players approaches problems from a somewhat different angle, and each has an important role in driving innovation and solving problems.

FFRDCs date back to World War II and its aftermath. Government agencies recognized the need to maintain and take advantage of a critical mass of science and technology knowledge not otherwise available in the standard civil-service environment.

To achieve this, the government created the FFRDC model around two key needs and organizing principles. First, these new organizations had to provide the government with access to a specialized, agile workforce available to respond quickly to complex national challenges. Second, they had to operate outside of the standard marketplace, so that commercial conflicts of interest did not compromise their objectivity.

This latter point is crucial: FFRDCs neither market nor manufacture the systems and technology the government must acquire. That distinction lies at the heart of the FFRDC concept. As part of the “third leg,” FFRDCs can provide high-level, fact-based analysis support that informs government decisions. The knowledge domains, skills, and services the government needs have evolved over the last seven decades. But the original motivation behind
the formation of FFRDCs—to retain centers of technical excellence free from commercial interests—remains just as relevant today as it was in the 1940s.

FFRDCs Operate in the Public Interest

Formally established under Federal Acquisition Regulation (FAR) 35.017, FFRDCs meet special, long-term research and development needs that are integral to the mission of the sponsoring agency—work that existing in-house or contractor resources cannot fulfill as effectively. They must operate in the public interest, free from conflicts of interest. Additionally, they are operated, managed, and/or administered by universities, not-for-profit organizations, or industrial firms as separate operating units.

To ensure the highest levels of objectivity, the FAR limits FFRDC activities. For example, the FAR prohibits FFRDCs from manufacturing products or competing with industry. These restrictions enable industry and government to confidently provide FFRDCs with sensitive or proprietary information without fear of improper use or disclosure. Additionally, as private entities, FFRDCs have greater flexibility than the government in recruiting and managing a highly skilled technical workforce that is capable of quickly responding to the sponsor’s needs.

Continuing Relevance and Value

The FAR also mandates a formal sponsoring agreement between the government agency and the FFRDC operator that defines the purpose, mission, and scope of work. Government sponsors conduct comprehensive reviews of their FFRDCs every five years to confirm the quality, efficiency, and appropriateness of the work program.

Since their inception, FFRDCs have made significant contributions to solving key national challenges. For this reason, the government has consistently reaffirmed their value. Moreover, because FFRDCs share the practical results of their work—through such methods as cooperative research and development agreements, technology licensing, open source participation, and contributions to industry standards—commercial industries benefit as well.

Working together, government, industry, and FFRDCs deliver the outcomes that make our nation stronger.

NREL as an FFRDC

- The U.S. Department of Energy’s (DOE’s) Office of Energy Efficiency and Renewable Energy (EERE), is NREL’s sponsor and primary client and is responsible for NREL’s long-term direction.

- NREL is a “government owned, contractor operated” (GOCO) FFRDC and as such is operated by the Alliance for Sustainable Energy, a limited liability company (LLC) co-managed and governed by Battelle and MRIGlobal.

- Battelle and MRIGlobal formed Alliance for Sustainable Energy, LLC, for the purpose of winning NREL’s management and operating (M&O) contract. As the M&O contractor, the Alliance is fully accountable to DOE for assuring NREL’s performance. The Battelle-MRIGlobal team has a multiple decade history of successfully working together at NREL and takes pride in the laboratory’s continued successful delivery of energy efficiency and renewable energy mission outcomes for DOE and the nation.

- NREL is governed by a board of directors consisting of five executives each from MRIGlobal and Battelle, and one each from the following five universities: the University of Colorado, Colorado State University, Colorado School of Mines, Massachusetts Institute of Technology, and Stanford University.

Sources include:
- https://www.mitre.org/ "FFRDCs—A Primer"
- Federally Funded Research and Development Centers and Technology Transfer by Sbahidi, Hassan and Xue, Lan—The George Washington University, 1994
- Federal Acquisition Regulation, 35.017: “Federally Funded Research and Development Centers”

Cover photo by Dennis Schroeder, NREL 38011