



Solar Decathlon Education Partner

Cooperative Research and Development Final Report

CRADA Number: CRD-21-18203

NREL Technical Contacts: Taylor Ryan and Rachel Romero

**NREL is a national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy
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Contract No. DE-AC36-08GO28308

**Technical Report
NREL/TP-5500-87664
September 2023**



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Cooperative Research and Development Final Report

Report Date: September 29, 2023

In accordance with requirements set forth in the terms of the CRADA agreement, this document is the CRADA final report, including a list of subject inventions, to be forwarded to the DOE Office of Scientific and Technical Information as part of the commitment to the public to demonstrate results of federally funded research.

Parties to the Agreement: National Energy Education Development Project

CRADA Number: CRD-21-18203

CRADA Title: Solar Decathlon Education Partner

Responsible Technical Contacts at Alliance/National Renewable Energy Laboratory (NREL):

Taylor Ryan | Taylor.Ryan@nrel.gov (for Stacey Rothgeb | Stacey.Rothgeb@nrel.gov)

Rachel Romero | Rachel.Romero@nrel.gov

Name and Email Address of POC at Company:

Mary E Spruill (Executive Director, signature on agreement)

Sponsoring DOE Program Office(s):

Office of Energy Efficiency and Renewable Energy (EERE), Building Technologies Office (BTO)

Joint Work Statement Funding Table showing DOE commitment:

Estimated Costs	NREL Shared Resources a/k/a Government In-Kind
Year 1	\$ 5000.00
Year 2	\$ 5000.00
TOTALS	\$ 10,000.00

Executive Summary of CRADA Work:

The U.S. Department of Energy Solar Decathlon® (DOE/SD) is a collegiate competition, comprising 10 contests, that challenges student teams to design and build highly efficient and innovative buildings powered by renewable energy. The winners will be those teams that best blend architectural and engineering excellence with innovation, market potential, building efficiency, and smart energy production. Solar Decathlon is comprised of two Challenges – Design Challenge (annual) and Build Challenge (biennial). The National Renewable Energy Laboratory (NREL) provides competition management for Solar Decathlon.

NREL and Participant establish this CRADA to enable the success of the Solar Decathlon program in managing sponsorship funds and creating a K12 education program. Participant is to act as an Education Partner to Solar Decathlon, which includes: 1) accepting and dispersing sponsorship funds for DOE/SD; and 2) providing K12 education program to support Solar Decathlon Competition Events in April each year.

CRADA benefit to DOE, Participant, and US Taxpayer:

- Assists laboratory in achieving programmatic scope, and/or
- Uses the laboratory's core competencies.

Summary of Research Results:

NOTE: This agreement was terminated (not cancelled) under the direction of the U.S. Department of Energy (DOE), after signing and prior to funding transfer or any work commencing. No work was completed; therefore, no publishing of novel science will result in relation to this CRD-21-18203 CRADA number. (The scope of work was ultimately executed under CRD-21-18248.)

Purpose Statement of Work

Under this agreement, Participant will act as an education partner to NREL. As a 501c3, Participant is able to both collect/disperse sponsorship funds on behalf of DOE/SD and deliver continuing education content to professionals. This combination allows NREL to offer tax exemption for sponsorship contributions to DOE/SD, and K12 educational engagement in conjunction with Solar Decathlon.

Task Descriptions

Task 1: Sponsorship Funds Management

In order to support the above, NREL will:

- Recruit and contract cash sponsors for DOE/SD and direct sponsors to route sponsorship funds to Participant (as appropriate);*
- Develop and approve income/expense budgets for the expenditure of sponsorship funds by Participant;*
- Track and fulfill sponsor program requirements.*

In order to support the above, Participant will:

- d. Create a unique bank account to accept and disperse sponsorship funds for DOE/SD;*
- e. Charge a 5% processing fee on sponsorship funds collected;*
- f. Issue sponsor invoices within 48 hours of notification from NREL that a sponsor has been secured;*
- g. Adhere to the budget detailed by NREL for payment of sponsorship funds and gain written approval prior to payment of any expense;*
- h. Pay approved expenses within 15 days receipt of approval;*
- i. Provide monthly accounting of income and expense to NREL.*

Task 2: Professional Development

Participant shall develop K12 education program that leverages Participant educational materials and resources to enhance DOE/SD experience for general public and community. NEED will provide invoice for pre-approval of scope and budget to NREL for work scope funded by sponsorship funds.

Task 3: CRADA Final Report: Preparation and submission in accordance with Article X.

This report serves to meet the requirement for the CRADA Final Report with preparation and submission in accordance with the agreement's Article X.

Subject Inventions Listing:

None.

ROI #:

None.